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*AN ARCHAEOLOGICAL SURVEY AND EVALUATION OF
PROPOSED RECREATIONAL DEVELOPMENTS,
CROWDER'S MOUNTAIN STATE PARK,
Gaston County, North Carolina*

Contract No. C-1168

Prepared For:

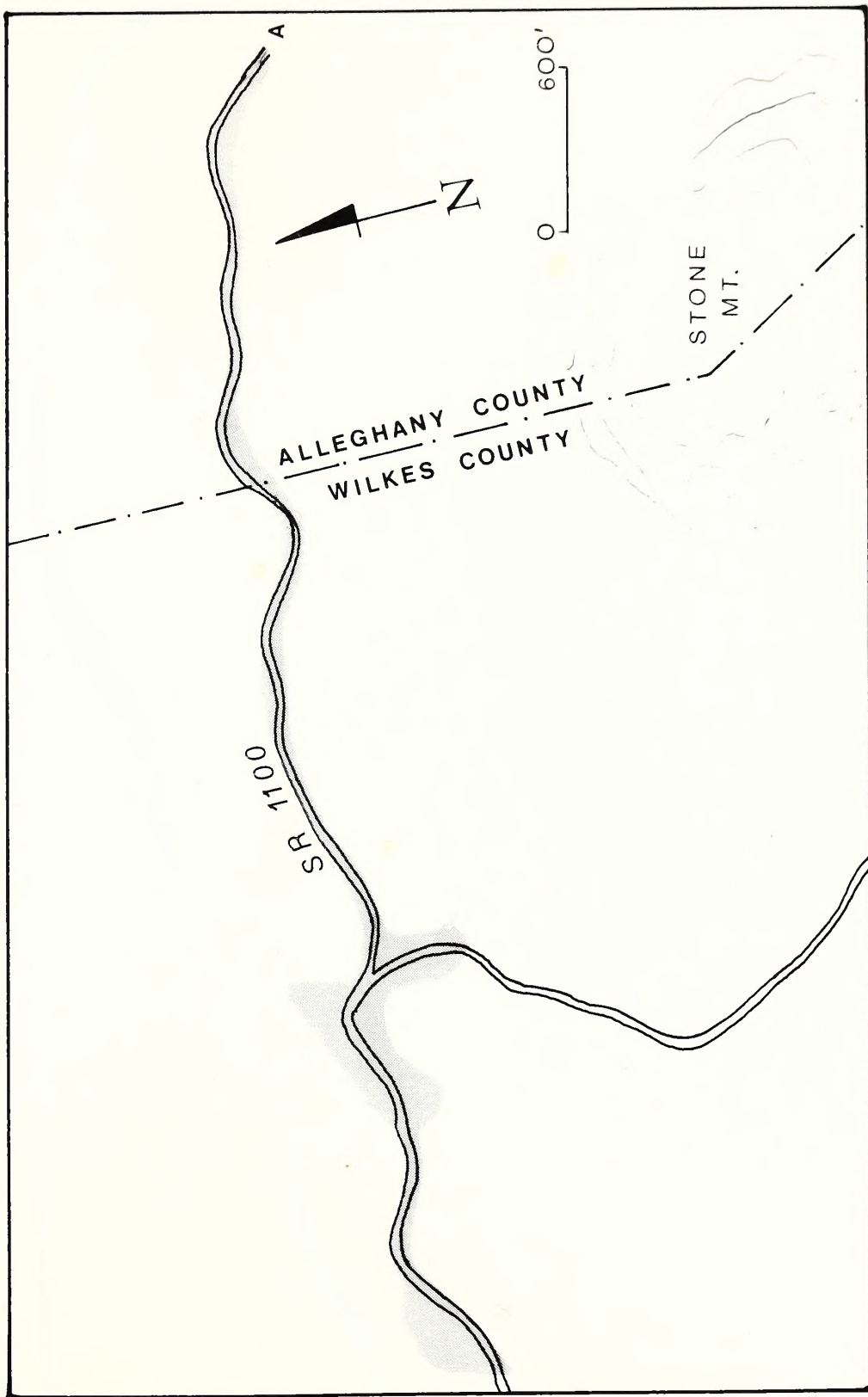
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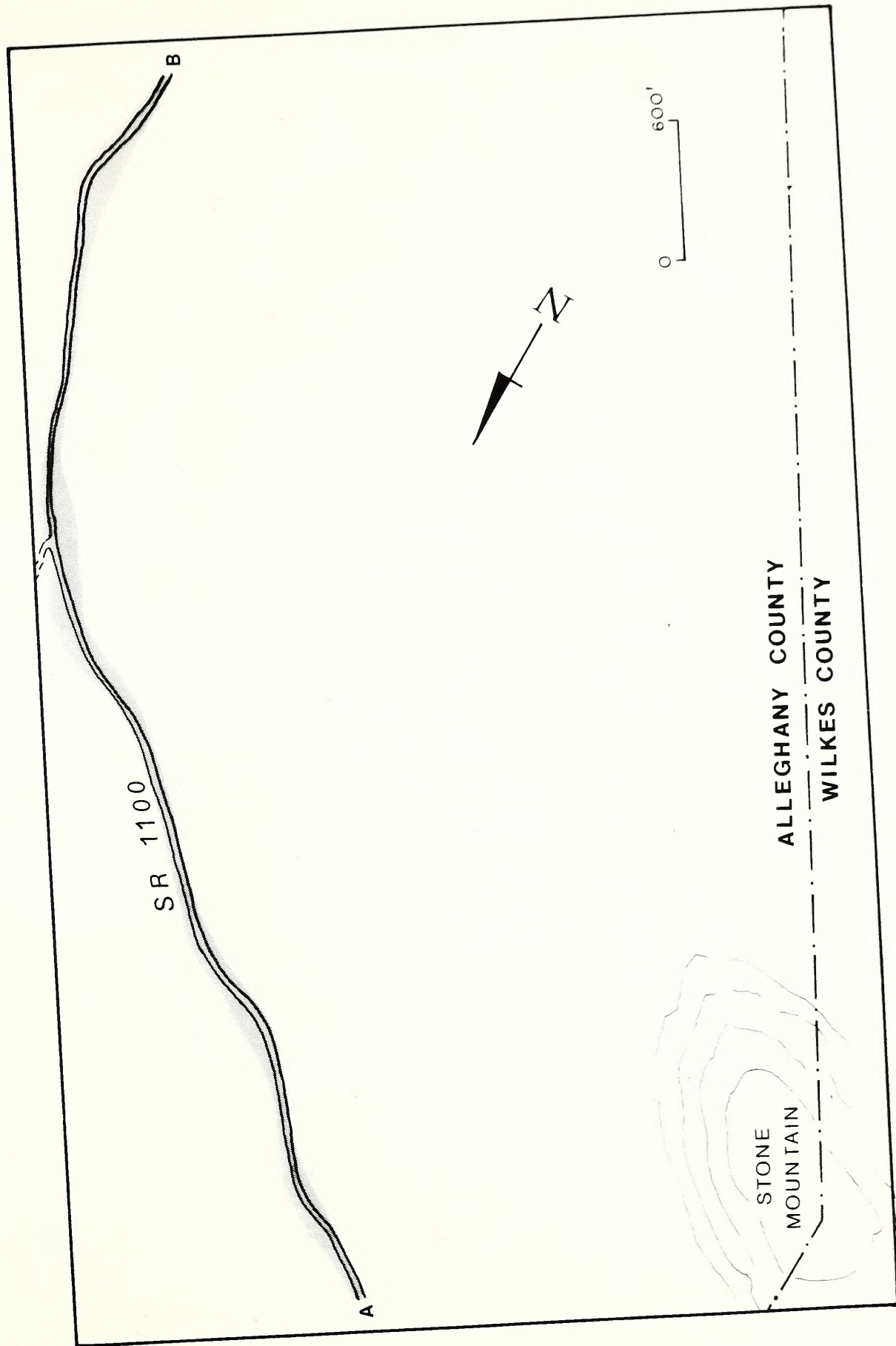
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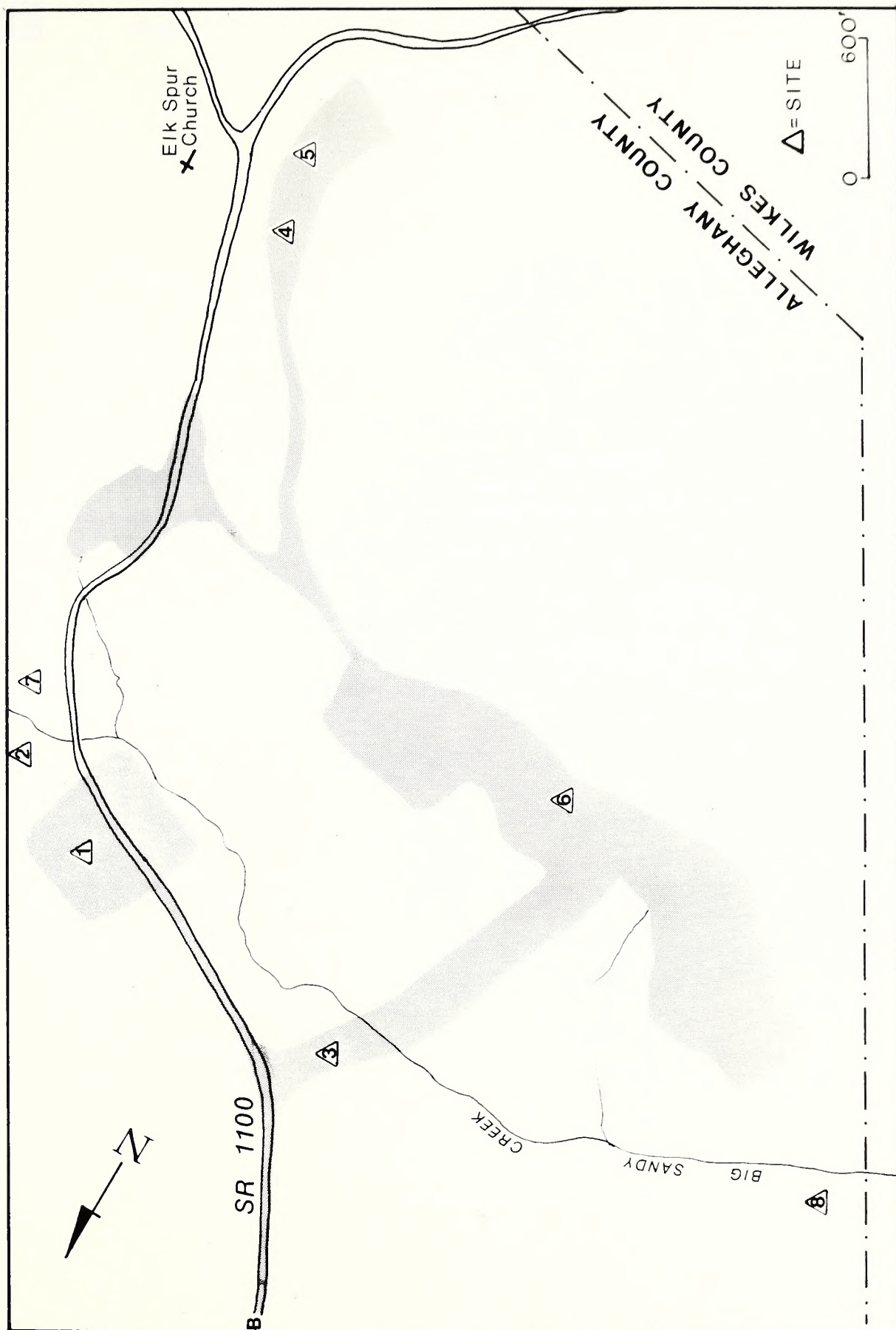
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Principal Investigator

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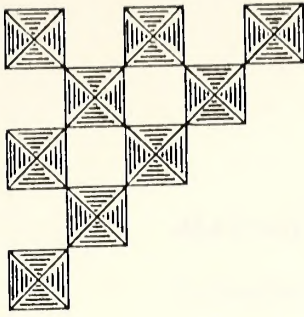






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CROWDER'S MOUNTAIN STATE PARK
Gaston County, North Carolina*

Prepared For
North Carolina Department of Natural Resources
and Community Development
Division of Parks and Recreation
Raleigh, North Carolina

By
Lesley M. Drucker

December 1980

*A Woman Owned Small Business Partnership
An Equal Opportunity Employer*


Lesley M. Drucker
Principal Investigator



Caroline

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Excavations - 1974-1975
Preliminary Excavations - 1976
Excavations - 1977-1978
Excavations - 1979-1980

Field Notes

North Carolina Department of Transportation
and General Services
Division of Archaeology
P.O. Box 26170
Raleigh, NC 27611

to

Mr. J. M. Smith

Department of

1. From the 1974-1975 Excavations
2. From the 1976 Preliminary Excavations
3. From the 1977-1978 Excavations
4. From the 1979-1980 Excavations

[Signature]
Lester R. Brown
Principal Investigator

TABLE OF CONTENTS

	<u>Page</u>
<i>Abstract</i>	<i>iii</i>
<i>Introduction and Acknowledgements</i>	<i>iv</i>
<i>Management Summary</i>	<i>1</i>
<i>Chapter 1. Environmental Background and Cultural Overview</i>	<i>3</i>
<i>Physical description of the project area</i>	
<i>Geology, hydrology and soils</i>	
<i>Land use and demographic patterns</i>	
<i>Environmental reconstruction for the prehistoric period</i>	
<i>Prehistoric perspective</i>	
<i>Historical overview</i>	
<i>Chapter 2. Research and Survey Methodology</i>	<i>23</i>
<i>Archaeological background and research design</i>	
<i>Objectives</i>	
<i>Methods</i>	
<i>Chapter 3. Summary of Findings and Recommendations</i>	<i>27</i>
<i>References Cited</i>	<i>29</i>
<i>Appendix A. Scope of Work (Division of Parks and Recreation)</i>	<i>35</i>
<i>Appendix B. Work Proposal and Budget (Carolina Archaeological Services)</i>	<i>43</i>
<i>Appendix C. Project Personnel</i>	<i>56</i>

LIST OF FIGURES

<i>Figure 1. Regional location of Crowder's Mountain State Park.</i>	<i>4</i>
<i>Figure 2. Adjacent land use relative to Crowder's Mountain State Park.</i>	<i>5</i>
<i>Figure 3. Crowder's Mountain State Park project area in relation to Kings Pinnacle, Crowder's Mountain and the Town of Mountain View.</i>	<i>7</i>
<i>Figure 4. Location of Crowder's Mountain State Park in relation to regional dendritic drainage watershed between Catawba River and Broad River.</i>	<i>9</i>
<i>Figure 5. Project development areas and location of archaeological investigations, Crowder's Mountain State Park.</i>	<i>Insert (25-26)</i>

LIST OF TABLES

	<u>Page</u>
Table 1. <i>Generalized Prehistoric Culture Sequence in Piedmont North Carolina.</i>	14

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ABSTRACT

An intensive archaeological survey conducted within approximately six acres of proposed recreational development area of Crowder's Mountain State Park (Gaston County, North Carolina), located no archaeological sites or historic structures. No properties currently listed on or determined eligible to the National Register of Historic Places are located within these direct impact areas. Projected environmental reconstruction for the prehistoric period and the geographic location of the park near protohistoric and historic trading paths and overland travel routes suggest that archaeologically sensitive areas exist around the base of the mountain and possibly on slopes of 2% or less, and should reflect at least protohistoric Catawba and possibly earlier prehistoric occupation, as well as Scotch-Irish and German farmsteads of the early historic period. Since no potentially significant properties were indicated in the proposed development areas by either background research or by archaeological survey, the recreational developments are recommended for archaeological clearance.

INTRODUCTION AND ACKNOWLEDGEMENTS

On October 9, 1980 archaeologists with Carolina Archaeological Services (Columbia, South Carolina) conducted and completed an intensive archaeological survey of approximately six acres of proposed recreational development sites within the Crowder's Mountain State Park in Gaston County, North Carolina. The fieldwork and associated background and literature search were undertaken in accordance with a scope of work prepared by the North Carolina Department of Natural Resources and Community Development, Division of Parks and Recreation, and a work design prepared by Carolina Archaeological Services. Archaeological assessment of the proposed development sites was conducted in compliance with the requirements of Section 106 of Public Law 89-665 as amended (National Historic Preservation Act), 36 CFR 800 (Procedures for the Protection of Historic and Cultural Properties), 36 CFR 1202 and 1204 (criteria for determination of site eligibility to the National Register of Historic Places), 36 CFR 1210 (Proposed Guidelines for the Recovery of Scientific, Prehistoric, Historic, and Archeological Data), North Carolina State Executive Order XVI, and the North Carolina State Environmental Policy Act (G.S. 113A).

All project activities were completed within the contract budget of \$750.00. A final contract for services was signed by both parties on October 6, 1980. A management summary of cultural resource assessments and management recommendations (interim report) was presented to the Division of Parks and Recreation on October 13, 1980, with a draft final report submitted to the Division on December 23, 1980. The final report will be submitted in bound form to the Division by January 16, 1981. The project was funded through state appropriations (Contract No. C-1168). Project personnel included Lesley M. Drucker (Principal Investigator) and Ronald W. Anthony (Field Archaeologist). The contract termination date was extended from December 22, 1980 to February 2, 1981.

Assistance in obtaining and reviewing archaeological and historical site information was provided by the professional staff of the Archaeology Branch, the Historic Sites Division, and the Archives Search Room of the North Carolina Department of Cultural Resources. Special thanks are due to Richard B. Hazard of the Division of Parks and Recreation, who served as Project Manager for the Crowder's Mountain State Park survey. His interest, promptness in providing necessary background materials and maps, and overall coordination of the work allowed the survey to be completed smoothly.

MANAGEMENT SUMMARY

Intensive archaeological survey of proposed recreational development Sites 1, 2 and 3 of the Crowder's Mountain State Park was conducted in order to evaluate the cultural resource potential of these areas prior to construction-related activities. A scope of work prepared by the North Carolina Department of Natural Resources and Community Development, Division of Parks and Recreation called for (1) background and literature search of relevant sources, (2) field survey with limited subsurface testing as necessary, (3) analysis of field data and comparative information, and (4) documentation of project activities, culminating in a project report of findings. A work proposal made in response to these stated needs provided a projected work schedule and research design within which to assess the project areas. An accompanying budget outlined specific research tasks and direct costs totalling \$750.00.

The major project limitations were in two areas: (1) natural environmental and (2) prior research in the project area. Erosion and prior disturbance within state park development sites is expected to directly affect the nature, content, integrity and significance of cultural resources which may be present. In addition, since prehistoric research relevant to the park is regional in scope, no specific distributional data are available within which to reconstruct or evaluate the precise nature of past land use and settlement history. Although a general overview of socioeconomic and political development of Gaston County provides some measure of the nature and location of major settlement efforts during the historic period, very few data in the form of historic buildings surveys or industrial surveys have been collected.

The present report summarizes the results of a background environmental and cultural overview search in terms of interpreting potentially significant aspects of the prehistoric and/or historic occupation of Crowder's Mountain State Park. Although no cultural properties were identified by the present survey, future research within the park boundaries should be cognizant of areal and regional subsistence, settlement and historical development models which are relevant to the project area.

All of the project areas covered by intensive archaeological survey of approximately six acres of Crowder's Mountain State Park (Development Sites 1, 2 and 3, including access roads) are located on high, relatively level and well-drained landforms (slopes of 0% - 6%) -- ridge tops, knoll tops, ridge saddles and flanking slopes. These areas would appear to offer optimum habitation potential for both prehistoric and historic occupation of the otherwise rugged topography in the mountain peaks' vicinity. However, no evidence of either aboriginal or historic utilization of these particular sections of the park are indicated, either by documentation/archival evidence or by ground survey. Several ground features suggestive of extensive disturbance were recorded within Site 3 on a low knoll scheduled for construction of a picnic shelter. The remnants of an old trail or roadbed were also noted extending at least from this knoll to a stone-blocked end outside the project area of Site 3. In checking with James Gulledge, Park Superintendent, it was discovered that sand/rock mounds, depressions, and trenches in this area were the remnants of logging activity conducted throughout the past 10 - 20 years. No artifacts were found to be associated with any of the

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mounded earth or depressions, or with the roadbed. A small pumphouse located just outside the Site 2 project area was constructed during the 1960's and contains no historic or architectural value.

These features were the only ones noted by the survey, and cannot be considered to contain the necessary cultural values for consideration as potentially eligible National Register properties. Although prehistoric artifacts have apparently been collected from the general area encompassing Crowder's Mountain State Park, none have been reportedly located within any of the three project areas (James Gullledge, personal communication). These finds have apparently been isolated surface finds, since no "camps" or other concentrations of materials have been reported to the superintendent's knowledge. No prehistoric sites have been previously recorded within the park by professional investigators.

Although the German settlement founded by Ulrich Crowder was probably located within the park boundaries, it is very unlikely that it extended into the project area, since it was a highly circumscribed type of settlement whose remains are located at some distance from the project area. Later scattered homesteads were located along Crowder's Creek, and various 20th century activities occurred near the northern base of the mountain, but there are no individual farmsteads or communities indicated in the basic overview literature which appear to be located in or near the project area. The more level portions of the park were apparently cleared and farmed; it is possible that isolated outbuildings associated with farming and/or livestock production may be located in these areas, which are not in secondary pine forest.

Thus, although the project areas, particularly the high, relatively level and well-drained contours, would seem to be well suited for temporary or extended use as either prehistoric or historic activity areas (exploitation of upland resources), survey and testing of these areas failed to indicate evidence of long-term or repeated occupation. In view of the failure of intensive testing and survey as well as documentary research to detect or suggest the presence of potentially significant cultural resources, no additional investigation is considered to be warranted. It is concluded that the proposed recreational development of the park will not adversely affect cultural resources within the restricted impact zones of Sites 1, 2 and 3 which meet National Register of Historic Places criteria of significance.

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CHAPTER 1.

ENVIRONMENTAL BACKGROUND AND CULTURAL OVERVIEW

Introduction

Archaeology has within the past 20 years begun to more heavily emphasize the importance of the adaptive relationship between culture and environment. The local environment affects and is affected by the land use practices of its occupants through a set of complex interrelationships, which are constantly changing or rearranging themselves through time (Binford 1965; Gumerman 1971). As opposed to our biological nature, culture (lifeways and traditions) is a learned means of coping with external environmental and social factors -- our adaptive skin, so to speak. This suggests that the relationship between a culture and its environment is one of more or less successful adaptation, since a culture is adapted to the degree at which it can remain stable through time under the normal stresses of its interaction with its environment. On the other hand, environmental change outside the normal range may prompt changes in the culture, whose adaptation thus becomes outmoded, leaving the culture to either undergo restructuring of its internal and external mechanisms, or cease to function.

Physical Description of the Project Area

Crowder's Mountain State Park marks the northeasternmost extent of the Kings Mountain range, and is located in Gaston County, North Carolina. The park is situated 25 miles southwest of Charlotte, six miles west of Gastonia and eight miles north of the South Carolina line (Fig. 1). Although the immediate vicinity of the park is lightly populated by farmsteads and small housing developments, and by vacant land (abandoned farms), adjacent land use of a more intensive nature is steadily encroaching on the park's borders (Davis and Williams 1975; Fig. 2). At present, the park itself sees recreational use largely from hikers and picnickers; utility easements also cross the property.

The Piedmont Plateau surrounding both Crowder's Mountain and the Kings Mountain Pinnacle stands at an average elevation of approximately 850 feet above mean sea level. Rising abruptly 775 feet above this plateau, Crowder's Mountain's maximum elevation is 1,625 feet above mean sea level. Crowder's and Kings Pinnacle form the most dominant peaks in the Kings Mountain Range, and constitute its northeasternmost extent. A high saddle connects these two peaks.

Since it is somewhat atypical of the prevailing landscape of the southern Piedmont, Crowder's Mountain experiences local variance in the generally moderate climate. The mountains have a moderating effect on winter temperatures, causing considerable warming of the cold air brought in by west or northwest winds (Davis and Williams 1975). Weather data gathered from the Charlotte weather station indicates a moderate climate for the region, characterized by cool winters and quite warm summers. Although winter temperatures are quite variable, extreme cold is rare and snow is infrequent. Normally, a long growing season occurs, with average frost-free days numbering a little over 230 days. Summers are long and quite warm, with considerable cooling at night. Rainfall is generally evenly distributed throughout the year, with the driest period occurring in fall.

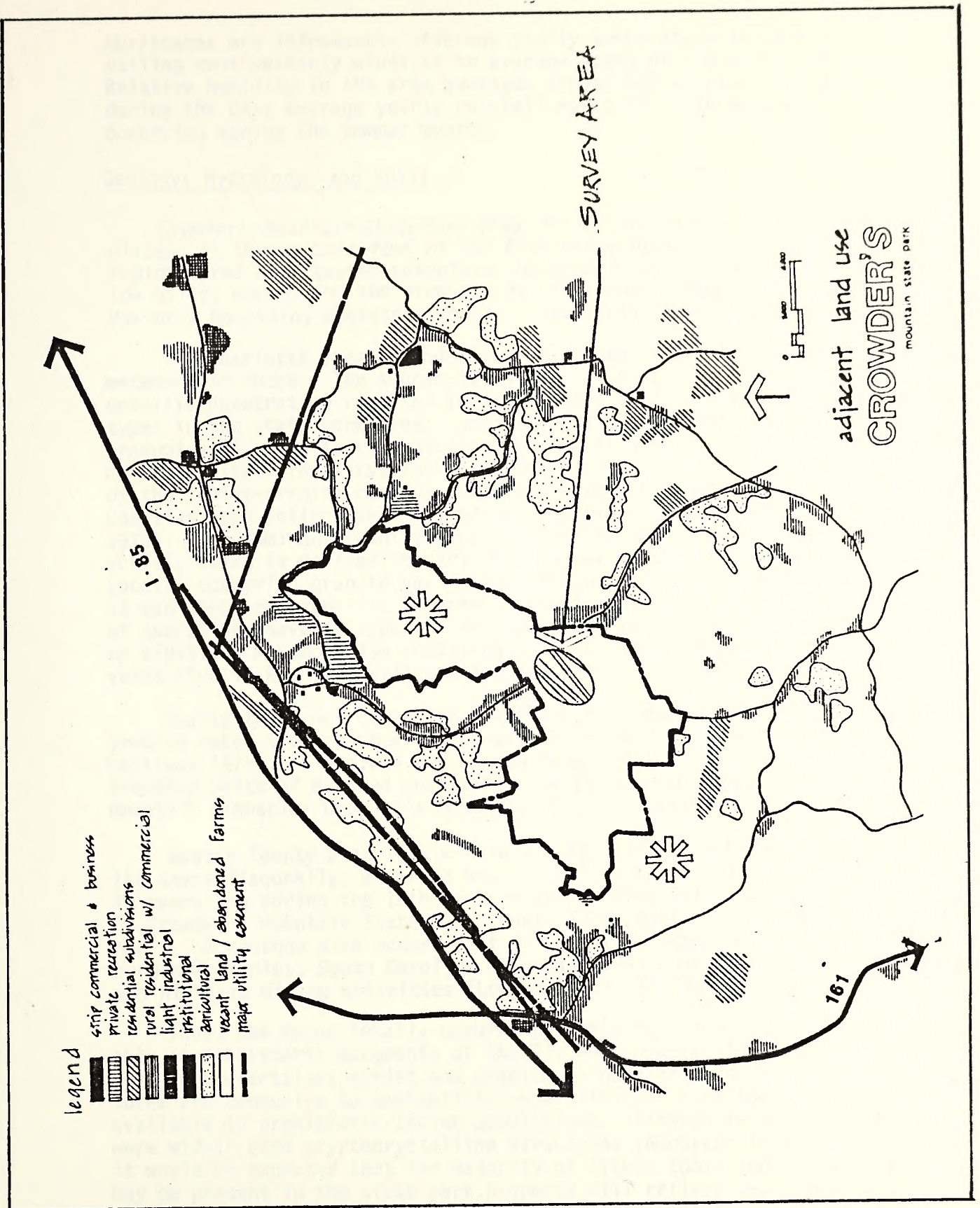


Fig. 2. Adjacent land use relative to Crowder's Mountain State Park. Source: Crowder's Mountain State Park Master Plan, used by permission from the North Carolina Department of Natural Resources/Community Development, Division of Parks and Recreation (Davis and Williams 1975).



Fig. 2. Map of the Gulf of Mexico showing the location of the study area. The map includes the Gulf of Mexico, the Yucatan Peninsula, and the surrounding landmasses. The study area is indicated by a shaded region in the central part of the Gulf. The map is oriented with North at the top.

Hurricanes are infrequent. Average yearly temperature is 59.8°F, with prevailing southwesterly winds at an average speed of 7.6 miles per hour. Relative humidity in the area averages around 80% at night and about 50% during the day; average yearly rainfall marks 42.72 inches, with the majority occurring during the summer months.

Geology, Hydrology, and Soils

Crowder's Mountain State Park (Fig. 3) lies entirely within the Piedmont plateau at the eastern foot of the Blue Ridge physiographic province. This region forms a dissected peneplain characterized by a rolling terrain of low hills, except for the prominences of Crowder's Mountain, Spencer Mountain, Pasour's Mountain, Whetstone Mountain and Little Mountain (Puett 1939).

The Charlotte area is underlain by a complex pattern of igneous and metamorphic rocks. The successive phases of heat, faulting and intrusive granitic penetration resulted in the formation of five identifiable geologic types in the state park area: granite, granite and mica schist (granite predominant), mica schist, mica schist and granite (mica schist predominant), and quartzite. The first four of these classifications are subdivisions of the schist-granite complex occurring across Lincoln, Gaston, and Cleveland Counties, and collectively called an injection complex (Davis and Williams 1975). The dominant country rock involved in the injection complex is mica schist, which is derived in part from sedimentary rocks (mainly shales). Locally occurring granite varies considerably in texture and physical appearance. It can occur as pegmatite (coarse-grained), but usually is found as a component of quartz and several types of feldspar, and in some places either muscovite or biotite. Metamorphism resulting from the injection processes has produced veins rich in kyanite, sillimanite, and garnet.

Quartzite is not common in the Charlotte area, but its resistance to erosion makes its presence conspicuous as ridges and knobs (Davis and Williams 1975). Cleveland and Gaston Counties are notable for northeastward-trending belts of exposed quartzite. It forms such elevations as Kings Mountain Pinnacle, Crowder's Mountain, Spencer Mountain, and Jackson Knob.

Gaston County also lies within the Carolina gold belt, which crosses the state diagonally, entering South Carolina through York County. Mines in operation during the 19th century are located both southwest and northwest of Crowder's Mountain State Park (Puett 1939; Gaston County Historical Society n.d.). Soapstone also occurs east of Bessemer City; quarries between Spartanburg and Pacolet, South Carolina were also available sources for prehistoric and historic mining activities (Lowman et al. 1970).

Thus, the major locally occurring lithic raw materials which were available to prehistoric occupants of the Piedmont plateau in the Kings Mountain belt were quartzite, schist and granite -- none of these crystalline structures are conducive to workability under limited stone tool technologies available to prehistoric Indian populations, although vein and crystal quartz were widely used cryptocrystalline structures (Goodyear 1979). Therefore, it would be expected that the majority of lithic tools and debitage which may be present in the state park property will reflect heavy quartz and quartzite use, with non-local materials (slate, argillite, rhyolite) forming a lower frequency of occurrence. Furthermore, non-local materials would be expected to reflect resharpening and maintenance activity rather than

early stage core or biface reduction (Brooks and Scurry 1980; Drucker 1980 in press; House and Ballenger 1976).

The project area is drained by several Rank 1 and Rank 2 streams which form the drainage areas of the Catawba and Broad Rivers (Strahler 1964) (Fig. 4). The major creeks include Crowder's Creek, Allison Creek, Catawba Creek and South Fork Catawba River (Catawba River discharge), and King's Creek and Beason Creek (Broad River discharge) (Metzger and Lesesne 1975). The Catawba River forms the boundary between Gaston and Mecklenburg Counties. King's Creek drains some of the park's runoff into the Broad River, but the majority of the surface drainage is handled by Crowder's Creek and South Fork Catawba River, which drains the upper Piedmont of North and South Carolina (Rank 3 stream -- Strahler 1964). These tributaries form a dendritic drainage pattern which is typical of many areas of the inter-riverine Piedmont uplands.

There are presently a relatively large number of man-made lakes or ponds in the immediate vicinity of the park site. Most are used for irrigation, recreation or scenic viewing. A few small impoundments exist on the park property; these undergo siltation periodically, but are generally of good quality. The proposed development Site #3 is situated adjacent to one of these impoundments (Fig. 3).

Ground water in the Charlotte area is derived from precipitation. Seasonal fluctuations of the water table are considerable; however, over a period of many years the net change in water level is small, indicating that the average annual discharge of ground water is about equal to the average annual recharge (Davis and Williams 1975). It is likely that this relative stability may have been even more marked prior to extensive clearcutting of the Piedmont forests during the historic period.

Ground water is discharged by springs and seeps, evaporation and transpiration, and by wells. Most of the spring and seep discharge enters the streams and maintains their flow during periods of fair weather. Precipitation percolates downward through the soil to the water table and then moves laterally toward the points of discharge. During the winter and spring when the water table is higher, the head is greater; therefore, the velocity is higher and the volume of ground water discharged is greater than in summer and fall when the water table is lower. Depth to water table varies with the local topography. In valleys the water table generally is at or near the surface; on wide flat uplands it is generally within three to ten meters below the surface; and on steep hills the water table may be more than 30 meters below the surface.

Soil series mapping within Gaston County indicates the occurrence of five basic soil types within the state park site. Chewacla loams are somewhat poorly drained, nearly level soils, which are alluvially deposited along major stream beds and drainages. Helena sandy loams are moderately well drained soils occurring on nearly level to moderately steep slopes, and are present in minor drains (Davis and Williams 1975). Both Nason silt loam and Tatum silt loam are deep, well drained soils present on the uplands and were formed in place from weathered schist bedrock. Goldston silt loam is well drained and gravelly, and is present on nearly level to very steep topography. The proposed development sites are situated in the Nason-Tatum-Pacolet association, which is typical of short, sloping to strongly sloping ridges, steep side slopes and hilly mountain land (U. S. Department of Agriculture 1973). These lands are only poorly to fairly suited to row crop agriculture, and provide fair to good forest habitats. Both soils

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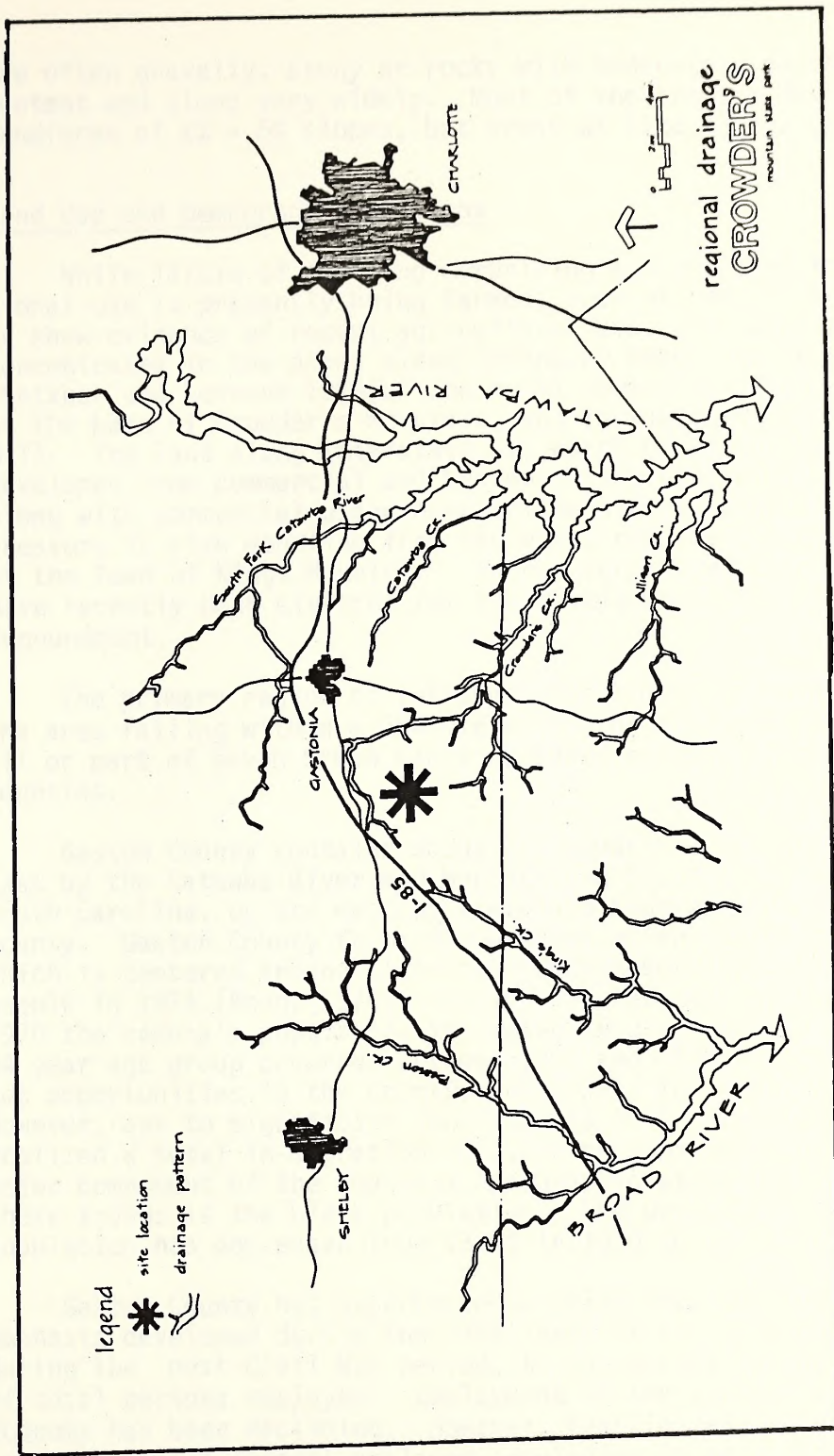


Fig. 4. Location of Crowder's Mountain State Park in relation to regional dendritic drainage watershed between Catawba River and Broad River. Source: Crowder's Mountain State Park Master Plan, used by permission from the North Carolina Department of Natural Resources/Community Development, Division of Parks and Recreation (Davis and Williams 1975).



are often gravelly, stony or rocky with moderately permeable clay subsoils; content and slope vary widely. Most of the project development areas are landforms of 2% - 6% slopes, but areas of Site #3 approach 8%.

Land Use and Demographic Patterns

While little of the land comprising and proposed for state park recreational use is presently being farmed, much of the adjacent lands are farmed or show evidence of recent agricultural use. Residential development is concentrated in the areas along secondary roads and in some new subdivisions (Metzger and Lesesne 1975). The rural community of Mountain View is located at the base of Crowder's Mountain, and is supported by the Cherryville Textile Mill. The land along Interstate 85, north of the park, has become highly developed from commercial and business uses spreading west from Gastonia. Along with commercial usage have arisen new residential subdivisions. Development pressure is also mounting from the west, resulting from the growth and expansion of the Town of Kings Mountain. Twenty acres southeast of the park office have recently been clearcut for the development of a fish farm and waste impoundment.

The primary region of influence for Crowder's Mountain State Park is the area falling within a 50-mile radius of the park, an area encompassing all or part of seven South Carolina counties as well as 15 North Carolina counties.

Gaston County contains about 263 square miles, and is bounded on the east by the Catawba River and Mecklenburg County, on the south by York County, South Carolina, on the west by Cleveland County, and on the north by Lincoln County. Gaston County forms the western extension of a large urban mass which is centered around Charlotte (Mecklenburg County) and contained 529,000 people in 1974 (Anon. 1976). During the ten-year period between 1960 - 1970 the county's population increased 16.8%. Out-migration of the 15-34 year age group occurred between 1950 and 1970 due to lack of diversified job opportunities in the county, especially for highly skilled positions. However, due to significant improvements in the retail sector, the county realized a total in-migration of 1,982 persons between 1960 and 1970. The major component of the county's demographic structure to be affected by these trends is the black population. The percentage of blacks to the total population has decreased from 13.4% in 1950 to 12.1% in 1970 (Anon. 1976).

Gaston County has experienced a shift from the heavily manufacturing emphasis developed during the first half of the 19th century and accelerated during the post-Civil War period, to non-manufacturing industries in terms of total persons employed. Employment in the agriculture sector of the economy has been declining. However, textile manufacturing is still the county's single largest employer, employing 33.8% of the total labor force. Textile and related industries comprised 51.3% of all existing industry in 1975.

The median family income of Gaston County in 1970 was \$8,884, as compared with the state's median family income of \$7,774, and \$12,051 for the United States overall (Anon. 1976). The per capita income of Gaston County in 1972 was \$3,414, as compared to the state's per capita income of \$3,721, and \$4,478 for the United States overall. Thus, although Gaston County's median family income is higher than the state's, the per capita income is lower than the state's (Anon. 1976; Metzger and Lesesne 1975).

Environmental Reconstruction for the Prehistoric Period

The southeastern United States has undergone four general climatic episodes in the last 25,000 years: (1) the Full Glacial (ca. 23,000 - 13,000 B.C.), (2) the Late Glacial (ca. 13,000 - 8,000 B.C.), (3) the Post Glacial (ca. 8,000 - 3,000 B.C.) and (4) the Recent period (ca. 3,000 B.C. - present) (Whitehead 1965, 1973; Watts 1971). During the Late Archaic and later times, the local environment appears to have been characterized by a general forest structure of mixed hardwoods along the bottomlands and oak-hickory on upland terraces (Shelford 1963). A fire subclimax condition with pines prevalent is common today, but it is unknown to what extent natural and artificial fires may have encouraged pines, grasses and green forage prior to European settlement.

During the late prehistoric period, pine forest fauna included rattlesnake, gray fox, white-tailed deer, fox squirrel, eastern cottontail, gray wolf and mountain lion. In addition, oak-pine forests (post-fire succession) would include bobcat, eastern chipmunk, gray squirrel, raccoon, white-footed mouse, opossum and black bear. The oak-hickory upland forests would have supported populations of turkey, wolf, bobcat, white-tailed deer, black bear, gray and fox squirrel, raccoon, opossum, striped skunk, golden mouse and cotton mouse (Shelford 1963).

With a gradual warming trend which followed the boreal conditions of the Full Glacial period, primary forests appear to have consisted principally of hardwoods (oak-hickory dominants), which reached their maximum extent from 8,000 - 3,000 B.C. (Post Glacial period). Mature forests were commonly massive as a result of deep compatible soils and ample, well-distributed rainfall (Byrd 1963:23). After this period pine development appears to have spread, particularly within the Coastal Plain (Whitehead 1965; Watts 1971). Massive land clearing in the 18th and 19th centuries and the subsequent abandonment of planted lands were followed by the regeneration of pure pine stands which are now being slowly replaced again in many areas by hardwood overstory dominants (Korstian and Coile 1936; K  chler 1964). The major hardwoods include oak, ash, sweetgum, cottonwood (floodplain), black gum, yellow poplar, maple and dogwood; valuable conifers include loblolly and shortleaf pine, Virginia pine and red cedar. Interest in conservative forest management has been stimulated in recent years primarily by the expansion of the pulp and paper industry in the region.

Historical records indicate that the Crowder's Mountain State Park area was mainly an undisturbed climax oak-hickory forest blending into beech, birch, and water oak on bottomlands and some xeric ridge top communities (Metzger and Lesesne 1975). In response to such stable habitat conditions, the wildlife of the area would have also been stable and diverse. Most of the species present today would have been present 200 years ago, as well as a great many others which either have disappeared or are rare to the area. Some of these species might include panther or cougar, black bear, wolf, bobcat, wild turkey, various raptorial birds including eagles, white-tailed deer, and possibly a woodland type of buffalo or bison. Most of these larger mammal and bird populations existed in stable populations prior to the settlement period by Europeans. Hunting and trapping, forest clearing and urban development have changed the landscape sufficiently to cause the introduction of new species and the expansion of formerly minor habitats. For example, the construction of lakes and ponds for industry, agriculture, and urban water supply brought migratory waterfowl to the land where they could not exist before. Non-native birds and fishes, including starlings and carp, are now found in the area, in most instances affecting native species (Metzger and Lesesne 1975).

The following table shows the results of the investigation of the cases of the disease in the various localities. The table is divided into two parts, the first showing the results of the investigation of the cases in the various localities, and the second showing the results of the investigation of the cases in the various localities. The table is divided into two parts, the first showing the results of the investigation of the cases in the various localities, and the second showing the results of the investigation of the cases in the various localities.

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Eight modern woodland communities have been identified in Crowder's Mountain State Park. Some are typical of the surrounding Piedmont, while others are more unique. Oldfield succession is the most dominant form of vegetative community within and adjacent to the park. Typically, abandoned farm lands will quickly grass over and gradually grow into the pine forest stage. Virginia and shortleaf pines in these areas will give way to hardwoods after a period of time (Korstian and Coile 1938). The mixed forest, or second woodland stage, is composed of both pines and young hardwoods. The third stage of hardwoods (young deciduous forest) contains such species as oak, hickory, dogwood and maple; understory in many of these forest areas includes orchids and ferns. When these mature hardwood forests are cut over, the fourth community of regeneration vegetation begins. Regeneration stands are more of a mix of various other ecotypes rather than a homogenous community (Davis and Williams 1975). A fifth forest type, the alluvial or swamp forest, is generally found along creek banks; beech, sweetgum, sycamore, ironwood, river cane, cottonwood and water oak typically dominate these communities, and provide sufficient sunlight filtration for heavy growth of ferns and wildflowers.

A sixth woodland type, the pure hardwood or pure pine forest, seldom occurs any more, due to many previous episodes of burning, drying or erosion in the project vicinity. Blackjack and chestnut oaks, along with Virginia pines, catbriers, honeysuckle and yucca, share these areas today with wildflower habitats. The upper mountainside forest type has also suffered the effects of burning and erosion. This forest of chestnut oaks and mountain laurel, scarlet oaks and Virginia and shortleaf pines, provides good habitat for catbriers and blackberries, along with red maples. Both of these forest types were typical of the upland slopes and plateaus during the early settlement period.

The last of the major floral habitats in the park area is probably the most fragile. The xeric ridge-top scrub forest contains dwarf Virginia pines and a few specimens of the blighted American chestnut; bear oaks and the rare ground juniper also occur in relative abundance in a few scattered locations (Davis and Williams 1975). These scrub forests also contain populations of black and turkey vultures, which use isolated rock outcrops on the mountaintops as roosts. Wildlife throughout the rest of the park is fairly typical of that found in the Piedmont: a variety of woodpeckers, songbirds, hawks and owls are present, along with the common small mammals such as squirrels, opossum, raccoon, rabbits, and mice. Grey and red fox also occur, as well as occasional bobcats. Local sources report that white-tailed deer are very scarce in the region, and that wild turkey are no longer sighted (Davis and Williams 1975).

The distribution and character of exploitable habitats and microenvironments within the park has undergone radical changes since Euro-American entry settlement. This region was probably the heart of an extensive Catawba Indian interaction sphere during the Protohistoric and Contact periods, the riverine resources of the Catawba and Broad Rivers appear to have supported both permanent and transient human populations (Lawson 1714; Brown 1966; Baker 1975). After the removal of Indian settlement in this region during the 18th century, lands were cleared and farmed intensively, resulting in large-scale modification of the land surface through erosion and stream

First, we must establish some basic facts. The first fact is that the world is a very complex and diverse place. There are many different cultures, languages, and religions. This diversity is one of our strengths, but it also presents challenges. We must learn to understand and respect each other's differences. Second, we must recognize that we are all part of a global community. Our actions have consequences that affect people all over the world. We must work together to address global issues such as climate change, poverty, and human rights. Third, we must embrace change and innovation. The world is constantly evolving, and we must be willing to adapt and learn from new experiences. Finally, we must strive for peace and justice. It is our responsibility to create a world where everyone has the opportunity to live a good life.

In conclusion, the world is a beautiful and complex place. We must work together to understand and respect each other's differences. We must recognize that we are all part of a global community. We must embrace change and innovation. Finally, we must strive for peace and justice. It is our responsibility to create a world where everyone has the opportunity to live a good life.

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channel morphology, and through the removal and/or shifting of bio-communities (Trimble 1974; Shelford 1963; Kùchler 1964). Today characteristic plants of the oldfield areas surrounding Crowder's Mountain State Park include goldenrod, catfoot, broomstraw, fescue grass, Johnson grass, scarlet sumac, blackberries, red cedar and speckled alder. Active farmfields support food grains and grasses, such as wheat, corn, oats, barley, rye, pygmy grass, soybeans, cotton and some peanuts (Metzger and Lesesne 1975; Puett 1939).

Prehistoric Perspective

The outlines of the prehistoric period which have been developed by Coe (1964), Caldwell (1958), Phelps (1964) and Wauchope (1966) are primarily drawn from Piedmont and, to a lesser extent Coastal Plain, research, but are assumed to have applicability to the southeastern Atlantic region as a whole. The following brief summary identifies some of the major features and developments of aboriginal human occupation of North Carolina as they relate to the project area. Although the discussion presents the prehistory of the region as a series of successive phases, this should be understood to merely reflect major changes through time. The given boundary dates "between" periods are therefore only an approximation of points within the gradual evolution of culture in this area, and are reflective of current archaeological evidence (Table 1).

Paleoindian Period

This occupational period (ca. 15,000 - 8,500 B.C.) is generally considered to be the earliest in the Southeast, being represented by site remnants of small bands of hunters and gatherers who appear to have inhabited the major river valleys. Most research would mark the beginning of the Paleoindian period as coinciding with the stabilization of post-Pleistocene, or essentially modern, environmental conditions, although evidence indicates that earlier occupations occurred during the Pleistocene as well. Although no stratified Paleoindian sites have been identified in North Carolina or South Carolina, Wauchope (1939) and Michie (1977) have suggested that Paleoindian occupations occurred throughout a wide range of lowland and upland habitations within the Fall Line, Piedmont and Coastal Plain regions. Analysis of distributions of isolated finds of characteristically fluted projectile points indicates that although sites are found in the Piedmont, they occur much less frequently here than in the Coastal Plain (Michie 1977). In contrast to this observation, however, is Perkinson's (1971) study of fluted point distributions in North Carolina, in which a disproportionate concentration of Clovis points is suggested for the Piedmont and Blue Ridge provinces vis-a-vis the Coastal Plain. Since both samples are probably incomplete, it appears that Clovis points are well distributed throughout the various physiographic provinces in a pattern similar to later point type distributions that are the result of adaptation to modern floral and faunal assemblages (Commonwealth Associates 1980:9).

The present survey located no diagnostically fluted points which are generally considered to be the hallmark of this early occupation period across North America, nor were any reported by local informants. This, however, does not preclude the possibility that such sites have either been redeposited through erosion and colluviation from the inter-riverine ridgetops of the project area or may be simply undiscovered in surface contexts.

TABLE 1.

GENERALIZED PREHISTORIC CULTURE SEQUENCE IN PIEDMONT NORTH CAROLINA

Period	Tradition	Temporally Diagnostic Bifaces*	Temporally Diagnostic Ceramics*
1,900	<div>Historic</div> <div> <div>Industrial</div> <div>Colonization</div> <div>European</div> <div>Exploration</div> </div>		Chicora ware group**
1,800			
1,700			
1,600			
1,500			
1,400	<div>South Appalachian</div> <div>Mississippian</div>	Caraway, Pee Dee	Pee Dee (Lamar), Savannah ware groups**
1,300			
1,200			
1,100			
1,000			
A.D. 1,000	<div>Early/Middle/Late</div> <div>Woodland</div>	Badin, Yadkin, Swannanoa	Thom's Creek, Refuge Deptford, Wilmington ware groups**
0			
B.C. 1,000			
2,000			
3,000			
4,000	<div>Late</div> <div>Archaic</div> <div>Middle</div> <div>Archaic</div>	Savannah River, Gary, Otterre Guilford, Morrow Mountain, Stanly	Stallings Island ware group**
5,000			
6,000			
7,000			
8,000			
9,000	<div>Early</div> <div>Archaic</div>	Palmer, Kirk	
12,000?			
	Paleoindian	Dalton, Hardaway-Dalton	

* For prehistoric aboriginal periods only.

** Ware groups based on South 1976.

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Subject	Population	Male	Female	Total	Percentage	Remarks
White	1,000,000	500,000	500,000	1,000,000	100%	
Colored	100,000	50,000	50,000	100,000	10%	
Chinese	10,000	5,000	5,000	10,000	1%	
Japanese	5,000	2,500	2,500	5,000	0.5%	
Indian	1,000	500	500	1,000	0.1%	
Other	100	50	50	100	0.01%	
Total	1,115,000	557,500	557,500	1,115,000	100%	

Archaic Period

A warming trend which marked the end of boreal forest conditions of the Ice Age also marked the beginning of the Archaic tradition in the eastern United States. This developmental phase (8,500 - 1,000 B.C.) first distinguished the eastern woodlands as a distinct culture area. The eastern Archaic appears to have evolved locally. The change from boreal to temperate forest conditions resulted in changing subsistence strategies for prehistoric populations, shifting in emphasis from the hunting of large herd fauna of the terminal Pleistocene to an intensive exploitation of locally available biotic and non-biotic resources. This subsistence pattern involved diverse sets of plant, animal and shellfish resources in the eastern woodlands and the Coastal Plain. The Archaic period also reflects ever-increasing elaboration of material culture, as well as population and geographic expansion into both riverine and inter-riverine environmental zones.

Goodyear (1979, 1980) separates the Early Archaic period into the Dalton, Side-Notched, Corner-Notched and Bifurcate Horizons. The Dalton Horizon (ca. 8,000 - 7,500 B.C.) is represented by the Hardaway Blade and Dalton-Hardaway point types, in association with marginally shaped end scraper forms and large, thick oval unifaces showing extreme step fracture wear. The Side-Notched Horizon appears somewhat later in time, but is also somewhat contemporaneous with the Dalton Horizon and is associated with the Hardaway Side-Notched point in North Carolina (Coe 1964). Side-notching was replaced by corner-notched points (Palmer in North Carolina) by approximately 7,500 B.C. Radiocarbon dates of approximately 7,500 - 7,000 B.C. have been obtained by Chapman (1976) for this horizon. The succeeding Bifurcate Horizon (ca. 7,000 - 6,000 B.C.) represents a rare point group in the Piedmont of North Carolina, but reflects a developed tradition in the mountains. Early Archaic subsistence patterns indicate a generalized hunting-gathering economy focusing on white-tailed deer exploitation, small game hunting or trapping, and acorn and hickory nut gathering.

The lithic technologies reflected at Early Archaic sites display strong continuities with the preceding Paleoindian period. New technologies are also apparent and most areas of the Southeast reflect much higher population densities during this period. It is probable that intensive exploitation of a wider range of biotic resources began during the Early Archaic period, and that these populations began moving into both riverine and inter-riverine habitats.

Research has suggested that transient groups moving out of the inter-riverine zones during the Middle and Late Archaic phases were capitalizing on migratory fauna and floodplain flora during the late winter months and from summer to early fall (House and Ballenger 1976:84-86; House and Wogamon 1978; Goodyear 1978). Research in the South Carolina Piedmont has also revealed Late Archaic activity within the inter-riverine zones, thus raising research questions concerning short-term vs. long-term occupation of distinct ecological zones and ecotones (Drucker and Anthony 1977; Goodyear 1978:13-14).

Stemmed points appear during the Middle Archaic phase. Goodyear recognizes Stanly (ca. 6,000 - 5,000 B.C.), Morrow Mountain (ca. 5,000 - 4,000

The first group of students who arrived at the end of the first semester of the year 1945-1946 were the students of the first year of the Faculty of Science. They were distributed in the various departments of the Faculty. The first group of students who arrived at the end of the first semester of the year 1945-1946 were the students of the first year of the Faculty of Science. They were distributed in the various departments of the Faculty. The first group of students who arrived at the end of the first semester of the year 1945-1946 were the students of the first year of the Faculty of Science. They were distributed in the various departments of the Faculty.

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B.C.) and Guilford (ca. 4,000 - 3,500 B.C.) Horizons for this period. Halifax must also be included (ca. 3,500 - 3,000 B.C.) in North Carolina. There is scattered evidence during this period that mobile hunting-gathering groups began incorporating a more varied plant processing technology into their adaptive system with the appearance of mortar stones at Doershuk (Coe 1964). Goodyear also notes changes in the hunting subsystem with a marked decrease in hide and meat processing unifaces from Early to Middle Archaic assemblages (Goodyear, Ackerly and House 1980); this pattern has also been observed at Doershuk and Hardaway (Coe 1964). Chapman (1977) and DeJarnette (1962) have also observed similar trends at Ice House Bottom and Stanfield-Worley, respectively; Chapman also indicates that acorns, hickory nuts and walnuts continued to be heavily exploited during the Middle Archaic period.

Sites of the Middle and Late Archaic period have been located throughout the Carolinas. The Late Archaic period is generally characterized by intensive gathering, collecting and hunting. The construction of shell rings and mounds along the Carolina, Georgia and Florida coasts suggests increased sedentism and the development of a more complex social system (Hemmings 1970; Sutherland 1974; House and Ballenger 1976; Marrinan 1975). The major changes which have been observed archaeologically between the Middle and Late Archaic periods are an elaboration of ground and polished stone technology, the increased exploitation of secondary resources such as shellfish and possibly seed plants, and the invention or reliance on containers (Commonwealth Assoc. 1980).

Late Archaic technological hallmarks include steatite vessels, ground stone tools, grooved stone axes, and broad-bladed corner-removed bifaces, such as the Savannah River point (Coe 1964) and the Otarre Stemmed type (Keel 1976:194-196). The Savannah River blade appears to be the most widely distributed form in the Piedmont and Coastal Plain physiographic areas, spanning the preceramic/ceramic transition period on the South Atlantic coast (Phelps 1964:89-95). The Otarre Stemmed blade possibly postdates the Savannah River phase in the South Carolina Piedmont, but appears to predate the Woodland period (Goodyear 1978:14).

The "transition period" (Stephenson 1975:10) from ca. 2,500 - 1,000 B.C. marks the earliest appearance of fired clay ceramics, generally classed into the fiber-tempered Stallings ware group and the sand-tempered Refuge and Thom's Creek ware groups (Stoltman 1974; South 1976; Trinkley 1980).

Steatite (soapstone) vessels often predate fired clay ceramics at stratified sites of the Late Archaic period. Several large steatite quarries between Pacolet and Spartanburg, South Carolina exhibit evidence of use by Late Archaic inhabitants of the Piedmont of South Carolina and North Carolina as a source for stone bowls and other receptacles (Lowman et al. 1970). This material was also used as building facing during the 19th century within the Greenville-Spartanburg area (Mills 1826). Soapstone is also available near Bessemer City in Gaston County. Steatite is absent from the portions of the project area studied. Although limited, this evidence is supported by other indications suggesting that localities other than Rank 3 streams and/or the trading paths were sporadically occupied, perhaps on a seasonal or temporary basis by prehistoric populations, while the more focal areas contained longer-term and/or extensively revisited habitation loci.

Woodland Period

The tendency for prehistoric population density to shift away from the inter-riverine to the riverine zones after 3,000 B.C. may have been influenced by several factors: a slight change in environmental conditions causing a reduction in forest productivity, or increasing reliance on floodplain agriculture related to increasing population pressure (Brockington 1978:9).

The Woodland period (ca. 1,000 B.C. - 1000 A.D.) reflects increasing social complexity and population growth. Evidence suggests that Woodland societies were based on a mixed economy of riverine horticulture, involving indigenous varieties of North American cultigens (Yarnell 1976), together with Mesoamerican maize and cucurbits, and supplemented by seasonal hunting and gathering -- a subsistence tradition with roots in the eastern Archaic tradition. Coe (1964) reports the presence of polished stone celts, atlatl weights, polished stone gorgets, pitted stone and polished stone pipes at the Gaston site; also an abundant antler and bone industry consisting of bone needles, awls, fishhooks, projectile points and antler flakers. Subsistence data from Gaston chronicles the exploitation of various small game such as beaver, squirrel, fox, mole, muskrat, opossum, otter, rabbit, raccoon, skunk and woodchuck. The dominant terrestrial mammal, however, was deer. Turkey, Canadian geese, catfish, gar and other fish species were also exploited. The only floral information recovered at Gaston reflected the storage and probable roasting of hickory nuts. A regular reliance on hunting and gathering has also been inferred from investigations at Wild Cherry (38PN22) in the Keowee River valley (South Carolina), where evidence of acorn procurement and storage occurs (Brockington 1978:11). This evidence is supported by site and activity patterning observed in the inter-riverine zones of the South Carolina Piedmont, suggesting seasonal (fall and early winter) habitation of these zones for the purpose of exploitation of deer and nut resources (House and Ballenger 1976:84-86; Goodyear 1978:14, 15).

Cultural characteristics of the Woodland period generally include village settlements, construction of burial mounds, the manufacture of small triangular projectile points and ground stone tools, and the widespread use of fired clay ceramics (Coe 1964). Woodland vessels are sherd, sand or grit-tempered; vessel shapes generally include simple unrestricted bowls and conoidal-based jars with a variety of surface decorations, including cord, fabric and net impressions, and carved paddle stamping. Smoothing of vessel exteriors and interiors is also found.

Mississippian Period

Usually considered to be the peak of pre-European native cultural development in the eastern woodlands, this phase (ca. 1000 - 1500 A.D.) represents an agriculture-based subsistence pattern, with settlement concentrated along well-drained, fertile creek and river bottomlands. Mississippian sites are generally larger than Woodland sites and suggest a more stable economy. Features at such sites suggest a well-developed village organization, including structural remains, large amounts of accumulated living debris, and the presence of domesticated food storage facilities for such items as maize, beans, squash and probably sunflower (Willey 1966:292; Yarnell 1976).

Several temple mound complexes, representing a regional variant of this cultural complex (Griffin 1967) called South Appalachian Mississippian

are located on the river systems of the Fall Line and upper Coastal Plain of North Carolina and South Carolina (the Irene-Town Creek Axis -- Reid 1967). The Town Creek mounds are located near the Pee Dee River (North Carolina); McCollum and Blair Mounds on the Broad River (South Carolina); Adamson, Boykin and Mulberry Mounds on the Wateree River (South Carolina) and Scott's Lake on the Santee River. Other South Appalachian Mississippian sites are located on the upper and middle Savannah River (Ferguson 1974:60; Caldwell and McCann 1941).

Cultural materials indicative of Mississippian occupation include the use of the bow and arrow, and the production of distinctive ceramic vessel shapes and surface decorations with a variety of complicated stamped designs, engraving and painting, corncob impressing and lip decoration. The addition of handles and appendages (lugs) and feet on vessels also seems to proliferate during this period. Mississippian sites in the Carolinas have produced non-local Ridge and Valley province black or translucent cherts, small triangular arrow points, corncob-impressed and complicated stamped pottery of the Irene, Lamar and Pee Dee types; Chicora ware group ceramics (South 1976) have been found along the length of the South Carolina coast and inland along major river systems, most frequently occurring along rivers which drain the Piedmont (Anderson 1975; Ferguson 1975). The floodplains of rivers originating in the Coastal Plain do not appear to be as subject to intensive agriculture as are those originating in the Piedmont, possibly due to less extensive rejuvenation of floodplain alluvium along Coastal Plain waterways. A correlation between geographic characteristics and South Appalachian Mississippian site distribution in the Southeast has been postulated by Ferguson (1975), and is based on the relationship between the dynamics of floodplain deposition and command of trade/communication networks throughout the sub-regions of the Southeast.

Mississippian subsistence in the North Carolina and South Carolina Piedmont appears to have been supplemented by seasonal hunting and gathering, as evidenced by small sites located within the inter-riverine zone, which probably represent hunting camps (House and Ballenger 1976; Goodyear 1978; Drucker 1979). Wild plant foods such as acorns, hickory nuts, walnuts and butternuts have been found at McCollum on the Broad River (Ryan 1971) and Warren Wilson in Buncombe County, North Carolina (Dickens 1976:204).

No evidence of Woodland or Mississippian utilization of the project area was discovered by the intensive survey. The apparent absence of post-Archaic aboriginal occupation of this locality of the northern Piedmont suggests that it may have been relatively low in resource productivity as defined by the subsistence-settlement system of the aboriginal inhabitants. Although a variety of microenvironments are available locally for support of broadleaf and needleleaf trees, including oaks, sycamores, pines, and fruit-bearing trees (potential food resources for human and animal populations), the area may not have been conducive to concentrations of large quantities of subsistence items (Lawrence 1976). This, in turn, may have offered less attractive habitats to concentration of white-tailed deer or other large fauna, or to migratory waterfowl; these resources would have probably been much more abundant within either (or both) the Broad River valley and/or the Catawba River valley.

Protohistoric and Early Historic Period

De Soto in his travels of 1540 traditionally was the first white man to see the North Carolina Piedmont, a land occupied by Indian groups for at least 10,000 years. Other early European explorers (Pardo in the 16th century, Lederer in the 17th and Lawson in the early 18th, among others) found the Piedmont occupied by Catawba and Cherokee peoples, who recognized a territorial boundary at the Catawba River. The land described by these early travelers was a great expanse of forests, plains and canebrakes, inhabited by deer, buffalo, elk, bear, wolf, fox, and other indigenous fauna, such as beaver, otter and wild turkey. Profitable trade items obtained by colonial settlers from the upcountry Indian groups included cured buffalo, bear and deer hides and skins. The earliest European occupation of the northwest portion of South Carolina and adjacent portions of southwestern North Carolina began as trading posts and cowpens along the major Indian trade routes, particularly the various Cherokee and Catawba paths which met at Kings Mountain and within the Catawba Nation (Cumming 1966; Brown 1966; Baker 1975). These paths were known as the Great Trading Path and the Lower Cherokee Trading Path, connecting Virginia to Charles Towne and the Lower Cherokee National settlements along the upper Savannah River.

Ethnohistorical sources indicate that the bulk of both Cherokee and Catawba lands east of the Appalachian Mountains was hunting territory and contained few permanent aboriginal villages. The project area of Crowder's Mountain State Park was located in Catawba territory. Lawson's (1714) description of the Catawba indicates that they were a powerful group with many villages located along the Catawba River and its major tributaries; their cleared fields extended as much as seven miles along the bottomlands. In 1728 they appear to have had six villages along the Catawba River. However, in 1738 and 1759 smallpox decimated and destroyed the nation.

About 1764 a treaty was signed between the Catawba and the Carolina colony, ceding 144,000 acres on the Catawba River to the Catawba Nation; the border between North and South Carolina was not established until 1772. Near the close of the Revolution, a part of the tribe was removed by the British to Virginia, where they stayed approximately 18 months. Thus, by the middle of the eighteenth century, internal pressures and the growing European threat had caused an apparent abandonment of all but a few villages in the Piedmont as Siouan, Cherokee, and possibly late-arriving Creek (Muskogean speakers) groups withdrew further into the mountain zone, leaving the remnant Siouan speaking groups of the Carolinas to gather together into a remnant Catawba Nation in the 19th century (Brown 1966; Baker 1975; Hudson 1976; Puett 1939). As a legal entity, the Nation survived until the mid-20th century. Today, many tribal members still remain on the Old Reservation or near the city of Rock Hill in York County. Excellent summaries and discussion of the history and present condition of the Catawba Nation can be found in Baker (1975) and Brown (1966).

Historical Overview

The first European settlers in the region moved into the South Point section between the Catawba and South Fork Rivers prior to 1750. Scotch-Irish and German migrants formed the bulk of the early colonization of what later became Gaston County, with English settlers arriving mostly after 1800; some English traders were present in the region before the Revolution (Puett 1939). Settlement waves were heaviest between 1735 - 1775, when Scotch-Irish groups began moving south from Pennsylvania. By 1762 Mecklenburg district was the center of Scotch-Irish settlement in the region. Pennsylvania German migrants also arrived in migration waves from 1663-1709, 1709-1727, and 1727-1775. These industrious farmers and livestock herders settled in compact communities with a church and school forming the center of the settlement.

The earliest settlement in the Gaston County territory (then Mecklenburg district) occurred from 1749 - 1751 at the junction of South Fork River and the Catawba River. In 1750 a fort and stockade was built here, which now lies under the waters of one of the hydroelectric generating lakes operated by Duke Power Company. Pioneer settlement focused first on the Catawba River and later began spreading up its tributaries. Log cabin homes were usually built on the bluffs overlooking these streams (Puett 1939).

By 1775, 65,000 Scotch-Irish and 25,000 Germans had settled in the area and by treaty with the Cherokee in 1777, all the land east of the Blue Ridge was turned over to colonial government.

One of the earliest settlers in the Crowder's Mountain section was Samuel Wilson, who landed at Charles Towne and settled originally in South Carolina, moving to Crowder's Mountain in 1767. By 1782 industry had been established in the north central part of Gaston County with the founding of an iron foundry by a German immigrant. This new industrial focus drew many more Germans to the area, who began settling just north of Crowder's Mountain. One of these settlers was Ulrich Crowder, who was granted land on the north slopes of the mountain now bearing his name. He continued to buy property until he owned not only the bottomlands but the entire mountain as well. In 1789 he founded the settlement of Ulricksburg, a 36-square mile community of German craftsmen and traders; the original grant for his community was made in 1748 (Lincoln County) (Williams 1980a). Crowder's journal indicates that his plans included one square mile of property for each family in the community. A total of 36 lots were envisioned: one for educational buildings, one for municipal buildings and 34 for family units. Although the town was established and maintained for a few years, Crowder's illness caused his probable departure from the community during the 1790's; he died shortly thereafter in Macon, Georgia. The town was probably built around the turn of the 19th century, although the actual number of houses remains unknown. According to the most recent research on the history of Ulricksburg, the settlement probably died because its lots were too big to allow for the growth of a close community spirit (Williams 1980b). Today, its remains include a few terraces, a springhouse foundation and walls, and part of a dam on a small stream, domestic shrubs and hedgerows. The site is located within Crowder's Mountain State Park near a present golf course.

Several miles south of Gaston County on the Kings Mountain ridge, the Battle of Kings Mountain was fought in 1780. With the retreat of Maj. Ferguson, commander of the Tory sympathizers, the Patriot forces won a significant victory for the Revolution.

By act of the General Assembly, Gaston County was formed in 1846 out of Lincoln County (established 1779). At that time the population numbered 8,000 persons (including 2,000 Afro-American slaves and a few remnant Indians (Cope and Wellman 1961). Hardly any settlements existed other than cross-road stores; the old log fort was long abandoned and lay in ruins. It was not until 1830 that the strong emplacement of cotton monoculture caused a significant demographic change in the population structure; after this period slaves became a notable segment of the local socioeconomic structure. (Cope and Wellman 1961; Puett 1939). In 1790, slave holdings totalled 935 for Lincoln County (no other non-white groups were listed); the largest single slave holdings numbered 22, 18, 16 and 14. However, by 1810, slaves accounted for nearly 16% of the county's population due to the importation of slaves from South Carolina to work the cotton plantations of Lincoln County. By 1860 Gaston County listed 2,199 slaves, or 24% of the total population; of the planter group, only 360 or 5% owned as many as 40 slaves. The remainder of the population was composed of small farmers.

From 1782 to 1800 new industries developed in southern Lincoln County, including an iron foundry (see above), gold mining and forest products (Gaston County Historical Society n.d.; Cope and Wellman 1961; Anon. 1976). Until the mid 1780's, local taxes were paid in local produce, mainly meat, grain, meal, molasses, brandy, whiskey and iron. Cotton and grain, pig iron and timber were shipped by water or wagon to Charleston; one overland route went around Crowder's Mountain. The War of 1812 spurred the establishment of cotton factories within the area, and by 1836 Lincoln County had one cotton factory with 12 looms and 1,280 spindles; four furnaces; nine forges; ore banks; 25 merchant mills (flour gristmills); common grist and sawmills; and industrial mining (limestone and gold near Kings Mountain). In 1860 Gaston County had grown to rely heavily on the industrial output of its three major textile mills and gold mine. Over 10 towns had been established, mostly around 14 mills. At this time, the better farm homes were built of wooden logs (squared and dovetail notched) with clay chinking or weather-board on the outside and detailed panelwork on the inside. Usually a kitchen was built separately behind or to the side of the house. Poorer farmers lived in one or two-room cabins.

By 1860 railroad lines extended across the northern part of Gaston County and the area was well on its way to cotton textile industrialization. During the Civil War, however, the county's economy and landscape suffered extensive destruction at the hands of Union forces. During the Reconstruction period, manufacturing was heavily boosted because of the non-profitability of continuance of the cotton plantation system (abolition of slavery). Not only textiles but the commercial production of cotton oil, iron products, and forest products were expanded (Blythe 1965).

During World War I, a training base for heavy artillery units was stationed at the northern base of Crowder's Mountain. Evidence of the use of the mountainside for target practice remains today (Davis and Williams 1975; Historic Sites Division, North Carolina Department of Cultural Resources).

In summary, agriculture was the only economic activity of consequence in Gaston County for nearly 100 years of its early existence. Around 1845 textile manufacturing plants began to be established along the numerous waterways for processing locally-grown plantation cotton, using hydro-electric power. Other industries which grew and became mainstays of the local economy were iron, lumber products, gold and minerals (especially kyanite). From these beginnings, Gaston County has grown into what one source terms "one of the foremost industrial counties in the United States, primarily in regard to the textile industry" (Anon. 1976). Within 97 years, the city of Gastonia grew from a small crossroads village incorporated in 1887 to a city with a population estimate in 1974 of 49,630 (county population 155,300). Gaston County is thus a part of the greater urban/industrial region of upper Piedmont South Carolina and North Carolina.

CHAPTER 2.
RESEARCH AND SURVEY METHODOLOGY

Archaeological Background and Research Design

Archaeological investigation of the Kings Mountain range in northern South Carolina/southwestern North Carolina has been limited, focusing mainly on documenting and reconstructing the Revolutionary War action which occurred at the Battle of Kings Mountain in 1780 (Carrillo 1976, 1977). Few archaeological sites have been recorded in the immediate vicinity of the Crowder's Mountain State Park, although the region near the Catawba River has been ethnohistorically documented as a focal settlement and inter-regional movement nexus between the Catawba and Cherokee nations. Scotch-Irish, German and English settlers peopled the upper Piedmont during the 18th century, and the region experienced strong economic growth throughout the 19th and 20th centuries due to its readily accessible water power, system of overland trade and (later) rail routes, and tillable land. Archaeological surveys in the Greenville-Spartanburg County area have located over 100 prehistoric and historic sites documenting the land use history of the upper Piedmont (Drucker and Anthony 1977, 1979 ; Goodyear 1978; Goodyear, Ackerly and House 1980, in press).

Historical research regarding the origin, placement and history of Ulricksburg (1789) has provided the major investigation of the park lands (Williams 1980a, b). Alan Stout, Director of the Schiele Museum in Gastonia, has recovered evidence of the town's remains and its character (1748 - 1800). Other research has documented the formal evolution of rural farmsteads (architectural history) (Anon. 1975; Dixon 1955).

Previous research and historical findings suggested that evidence of protohistoric or earlier Indian occupation of the park property may exist, since the park is located near the crossing of two major trading paths (Cummings 1966). Historic farmsteads, associated with possibly German settlement or later Euro-American settlement, were also considered potentially present (domestic structures, dependencies, mill-related structures).

The research orientation which affected the field strategy and data collection techniques for the intensive survey was the collection of distributional (descriptive) data concerning the temporal and functional dimensions of human settlement history and human geography within the project area, and the possible relation of this distribution to a broader context of inter-riverine and riverine Piedmont research on subsistence and settlement systems. This topic has received a great deal of emphasis in South Carolina, and has produced several testable hypotheses and overall ecological models (House and Ballenger 1976; Goodyear 1978; House and Wogamon 1978; Drucker, Anthony and Harmon 1979; Drucker 1979). A corollary of the research design was to derive a site density estimate for the project area which might be useful in comparing different segments of the park under similar topographic and environmental conditions.

A specific research question for the prehistoric occupation of the park was one which dealt with patterned site distribution across the landscape.

CHAPTER 10
THE HISTORY OF THE UNITED STATES

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and change. From the first European settlements to the present day, the nation has expanded its territory and diversified its economy. The early years were marked by the struggle for independence from Britain, followed by a period of territorial acquisition and westward expansion. The mid-19th century saw the Civil War, a pivotal moment in the nation's history that resolved the issue of slavery. The late 19th and early 20th centuries were characterized by industrialization, urbanization, and the rise of a powerful federal government. The 20th century has been a period of global conflict, social change, and technological advancement, leading to the United States' emergence as a superpower.

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A specific research question for the project is: How has the role of the federal government in the economy changed over time?

During an intensive archaeological survey of a 600-acre project area for the proposed state park on Lake Hartwell, South Carolina (Oconee County), Carolina Archaeological Services had focused research on correlating prehistoric site components and types with slope elevation, slope direction and distance from a permanent water source (ranked stream). A corollary research question concerned lithic procurement and usage patterns at located sites within the upper Piedmont. It was hoped that the survey of Crowder's Mountain State Park project areas would be able to consider similar questions concerning past land use and changes in subsistence, settlement and procurement behavior during the prehistoric period. On the other hand, it was recognized that the survey was liable to produce distributional data of only limited applicability to any probabilistic models or generalizing statements.

Objectives

The primary project objectives were to accomplish those tasks required by the contract, which were to: (1) locate, identify and assess those cultural properties existing within the proposed project area (Sites 1, 2 and 3) with reference to the criteria of eligibility to the National Register of Historic Places (36 CFR 800; 36 CFR 1202), (2) evaluate the type and degree of anticipated project effect on identified cultural properties, (3) document all investigations and research, and (4) make recommendations regarding mitigation of likely adverse effect to potentially eligible or listed National Register properties.

To accomplish the project-specific goals dictated by cultural resource management needs, several tasks were outlined for performance. These were:

- A. Background and literature search; local historical review.
- B. Field survey of approximately six acres of proposed construction area and access road upgrade, to include systematic and intuitive subsurface testing.
- C. Assessment of research and/or historical potential contained in identified cultural resources (structural and non-structural), according to 36 CFR 800.
- D. Evaluation of probable project impact to identified cultural resources.
- E. Evaluation of adequacy of current descriptive data for determining eligibility of identified sites within the project area for National Register; recommendations concerning mitigation alternatives.
- F. Documentation of all field investigations, to the level of intensity commensurate with the findings.

Methods

Prior to and after fieldwork, an intensive search of available published and unpublished site information, environmental and historical background data were collected for an overview of the cultural resource potential of the state park project areas. Employees of the park system were interviewed, particularly the park superintendent (James Gullette), as well as local

residents. Consultation was conducted with the site files, maps and resource personnel with the Archaeology Branch (North Carolina Department of Cultural Resources); the Archival Search Room of the State Department of Archives and History; the Historic Sites Division (North Carolina Department of Cultural Resources); University of South Carolina research manuscript collections; Gaston County Public Library historical research resources (Gastonia); and historical map collections (Cumming 1966; Mills 1825).

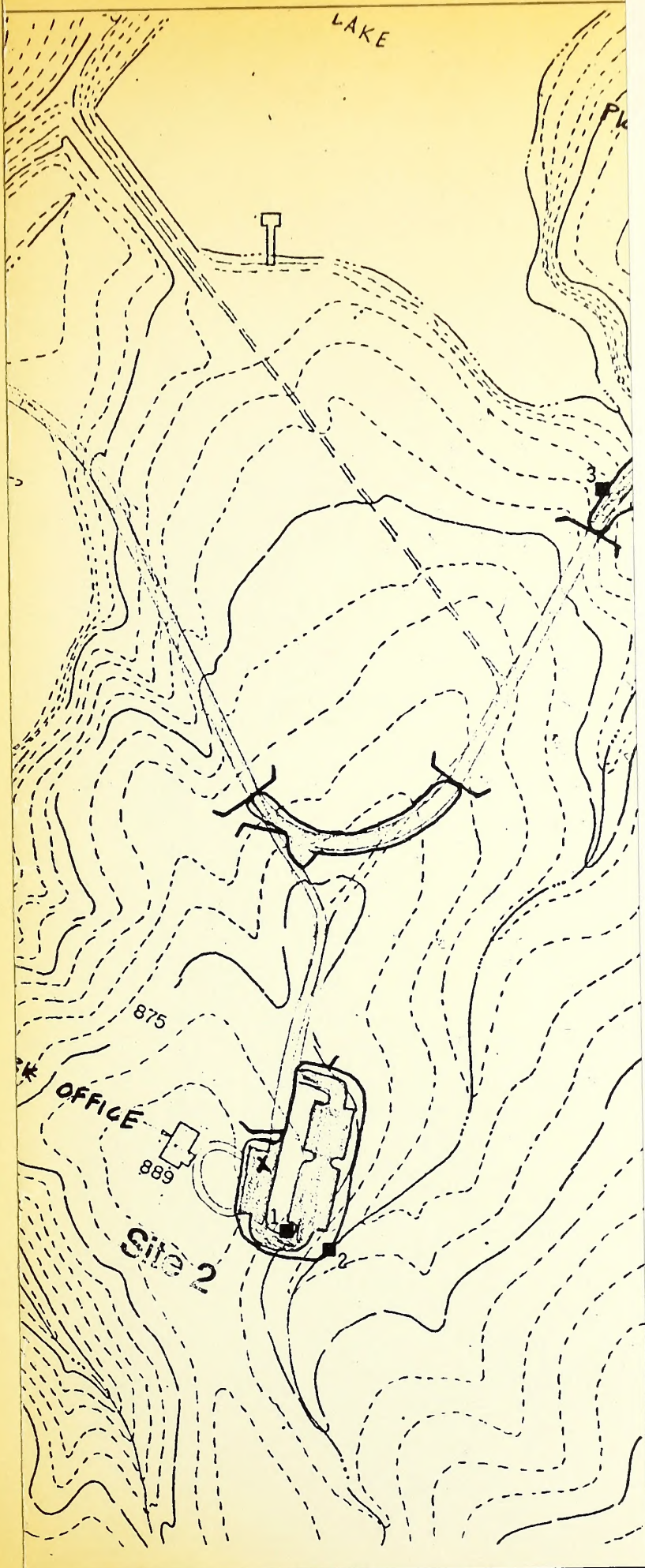
At the time of survey, approximately 73% of the project acreage was in secondary mixed pine/hardwood forest; the remaining approximate 27% reflected early oldfield succession and contained small patches of highly visible ground surface (75% - 100% visibility). About 60% of Site 2 (approximately .6 acres), 100% of Site 3 (approximately 4.8 acres) and 90% of Site 1 (.6 acres) contained fair to poor ground surface visibility. Of the access roads covered by the survey, 100% contained highly visible ground surfaces; shoulder areas which were inspected ranged from 15% - 30% visibility. All existing access roads surveyed (approximately 3,000 linear feet) are classified as developed areas; the remainder of the project area is classified as forest and oldfield/pasture.

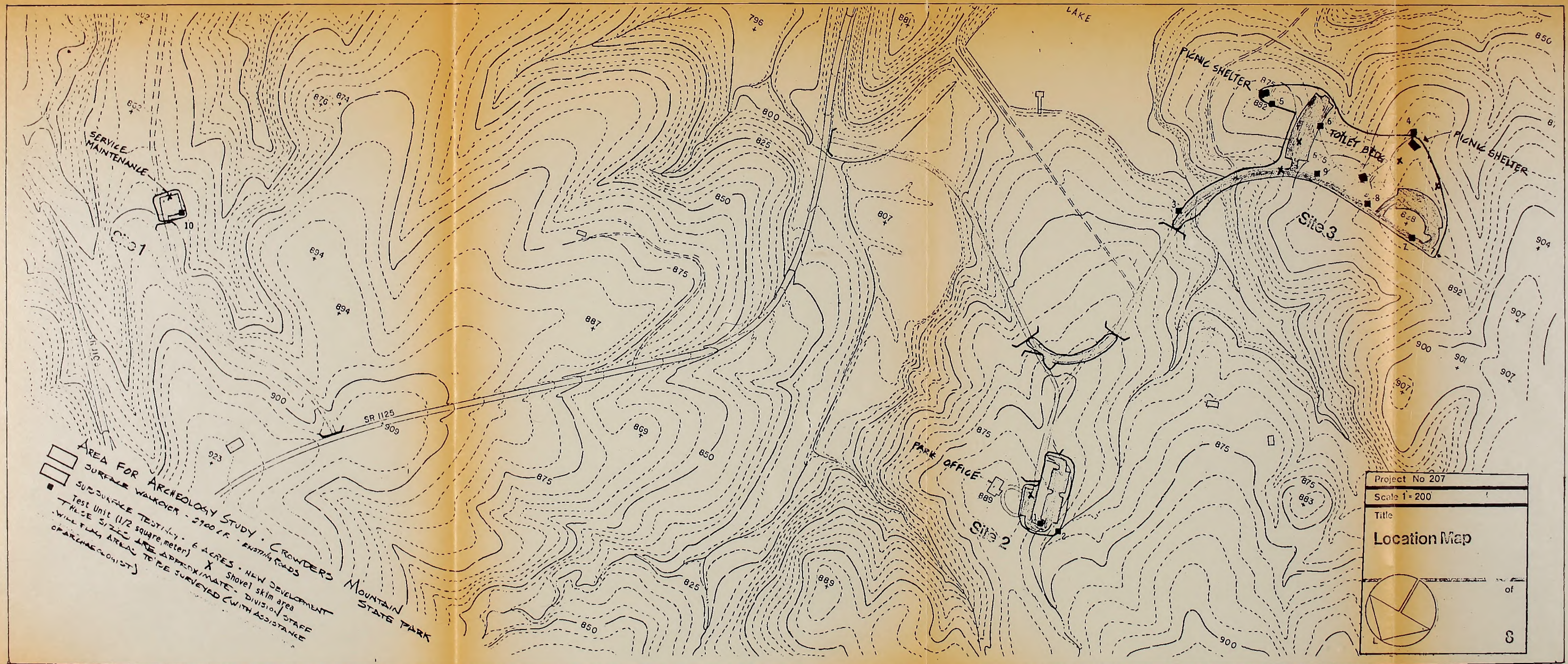
For purposes of the intensive archaeological survey, a *site* was defined as any locus of definable human activity as reflected by the patterned remnants of that (those) activity(ies). An arbitrary but useful indicator of a definable site is the occurrence of a minimum of five artifacts within a 225 square meter area. Artifacts observed without a stratigraphic (horizontal or vertical) context are termed "isolated finds."

Archaeological fieldwork consisted of an intensive examination of the ground surfaces contained within the direct impact areas defined by project management planning (Fig. 5). Field procedures included the following: (1) general (unstructured) pedestrian walkover survey of existing access roads, logging roads, parking areas, road shoulders, eroded areas and picnic areas, as well as any other bare ground surfaces associated with the project area; (2) intuitive placement of subsurface tests and manual raking or shovel skimming of the ground surface on landforms considered suitable for human occupation (slopes of less than 6%, colluvial slope toes, ridge saddles, alluvial terrace); (3) systematic compass vector placement of one-half square meter subsurface tests within wooded areas of poor ground surface visibility (discovery tests).

Survey collection techniques were designed as three types: (1) total surface collection; (2) selective surface collection (grab sample of diagnostic artifacts plus a range of raw material types and/or artifact classes); and (3) subsurface provenience collection from test units. Although Collection Technique #1 was used within the project area, subsequent examination of questionable lithic specimens revealed that no artifacts were present in the initial collection.

Systematic vector placement of subsurface tests was conducted within development Sites #1, #2 and #3. Site #1 consisted of the proposed service maintenance area and access road south of SR 1125. Site #2 consisted of expanded parking facilities just west of the present park office, as well as an access road to the office from SR 1125. Site #3 consisted of approximately 4.8 acres of proposed picnic area (100% forested) and access road. A total of approximately 3,000 linear feet of existing roads was thus covered by pedestrian surface inspection by two persons; the total acreage covered by subsurface testing was approximately six acres.





AREA FOR ARCHEOLOGY STUDY - CROWDERS
SURFACE WALKOVER - 2900 LF - EXISTING ROADS
NEW DEVELOPMENT
Shovel skim area
Division staff
WILL FLAG AREAS TO BE SURVEYED WITH ASSISTANCE
OF ARCHEOLOGIST

Project No 207
Scale 1" = 200'
Title
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8

A total of ten subsurface test units, each approximately one-half square meter in size, was placed within the project areas; supplemental ground surface inspection under extremely poor surface visibility conditions included manual raking of forest litter or rocks, and shovel skimming of the top several centimeters of soil. Site #2 contained ground surfaces which were 40% - 90% visible in its southern half; therefore, testing was concentrated within the northern half, which was 100% obscured. Site #1 also contained visible ground surfaces (20% - 100%), particularly along the road which passes through the proposed maintenance area and along a road remnant north of the project area. A decision was made to place a test at the far southwestern corner of Site #1, and was based on a judgmental observation that the edge of the contour constituted a well-defined landform between steep colluvial slopes. The ground area which was staked and flagged at Site #1 was somewhat larger than the area indicated by the state scope of work; however, a surface inspection was conducted over the entire area (eroded), with the subsurface test then located within a less eroded and higher contour than that which typified the southeastern segment of this area.

Testing at Site #3 included the intuitive and systematic placement of subsurface units at topographically and geographically "sensitive" areas related to predicted human habitation and use. Upon finding little reason to continue with a tight-interval testing strategy (15 - 30 meter intervals between tests), a modified strategy was implemented within the proposed picnic acreage, in which subsurface units were placed at 60-meter intervals along two parallel compass vectors spaced approximately 60 meters apart (Fig. 3). This testing strategy was not experimental in nature for purposes of evaluating different testing techniques or designs, but was simply an on-site judgmental modification designed to more efficiently and realistically evaluate the cultural resource potential of Site #3. A similar testing strategy has been used extensively within the Piedmont uplands, and in combination with bare ground inspection and periodic exposure of topsoil provides a reasonably reliable method of projecting site occurrence and density. Topography was used as a criterion for the placement of Test Units 4 and 5 on heavily eroded ridge tops; the remaining tests were placed on relatively level contours which held more potential for deeper soils and less disturbed sites. Since most of the tract (over 90%) bore visible evidence of erosion, logging, sheetwash and other soil disturbance, closely-spaced interval testing was felt to constitute a labor-intensive process with a low projected rate of significant yield.

All remaining project areas consisted of road widenings and/or parking areas and turnarounds. Field inspection of these areas indicated extensive prior soil disturbance, such as grading, leveling, filling, graveling and clearing. These areas reflect extremely poor potential for containing sites or site remnants of sufficient integrity to constitute significant research, historical, architectural, commemorative or associative properties at the local, state or national level.

A photographic log and field journal were maintained throughout the project research. A synthesis of project activities and results was presented to the Department of Parks and Recreation in the form of a management summary in early October 1980.

Soil samples were collected from several subsurface tests and identified by Munsell color terminology, content, and type or series (Munsell 1969; State of North Carolina 1975; Metzger and Lesesne 1975; Camp 1965).

CHAPTER 3.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

No cultural properties were identified by the intensive survey within the boundaries of defined recreational development sites associated with Crowder's Mountain State Park (Sites 1, 2 and 3). For this reason, a discussion of the appropriateness and significance of methods, techniques, approaches, and analyses concerning archaeological site evaluation, as described by the state scope of work, is inappropriate. Although the project areas, particularly the high, relatively level and well-drained contours, would seem to be well suited for temporary or extended exploitation of upland resources, survey and testing of these areas failed to indicate evidence of either long-term or short-term occupation. Most of the proposed development areas reflect extensive soil deflation and prior disturbance, largely through logging activities. In view of the failure of intensive testing and survey, as well as documentary research, to detect or suggest the presence of potentially significant cultural resources, no additional investigations are considered advisable, and it is concluded that the proposed development activities will not adversely affect cultural resources meeting National Register of Historic Places criteria of significance. Archaeological clearance of Sites 1, 2 and 3 is therefore recommended.

Although a designation of interpretive themes for state park consideration is inappropriate based on the negative results of the survey and on the regional scope of existing prehistoric and historical syntheses, there is a set of basic research topics which should be used to structure future research within the park boundaries. These topics are related to, though not exhaustive of, the state historic preservation plan.

All of the project areas covered by the survey are located on high, relatively level and well-drained landforms (slopes of 0% - 6%); ridge tops, knoll tops, ridge saddles, colluvial slopes and colluvial terraces or ridge toes. These areas would appear to offer optimum habitation potential for both prehistoric and historic occupants of the otherwise rugged topography in the mountain peaks' vicinity. In addition, Crowder's Mountain is located in the vicinity of at least one major north-south trading path which was used during the protohistoric and Early Historic periods, if not earlier (Cumming 1966). The park is located within a watershed divide between two major drainages and therefore is a part of the inter-riverine Piedmont. Regional research has indicated that prehistoric settlement in such zones tends to concentrate on the procurement and/or processing of specific resources, such as foodstuffs, stone raw material, and possibly vegetal fibers, cane and wood. Topography, bio-communities, water sources, lithic material access, and other natural factors should therefore be closely correlated with the density and type of prehistoric sites within the park. Historic settlement of park lands is expected to be concentrated along the major streams, terraces, and overland arteries and should reflect both Anglo and Germanic settlement traditions. Light industrial (gristmills, saw mills, cotton gins) sites may occur along the streams, also.

These broad predictions and models suggest that future research topics on land use and cultural development within the Crowder's Mountain State

THE HISTORY OF THE
CITY OF BOSTON

The history of the city of Boston is a subject of great interest and importance. It is a city of many centuries, and its history is a record of the growth and development of one of the most important cities in the world. The city was founded in 1630, and since that time it has been a center of commerce, industry, and culture. Its history is a story of the struggles and triumphs of a people who have built a great city out of a small settlement. The city has been a center of the American Revolution, and it has played a leading role in the development of the United States. Its history is a story of the growth of a great city, and it is a story that is still being written.

There is a great deal of interest in the history of the city of Boston, and it is a subject that is well worth studying. The city has a rich and varied history, and it is a city that has played a leading role in the development of the United States. Its history is a story of the growth of a great city, and it is a story that is still being written.

Park should concentrate on study of the distribution, nature and content of prehistoric settlement (site density through time, reoccupation of sites, lithic procurement patterns, etc.), and on the nature and economic orientation of historic settlement in relation to the rest of Gaston County. Expansion and revision of these research topics will be possible as area-specific cultural resource studies lead to refinement of the predictive models of human habitation of the southern part of Gaston County.

Baker, George H.

1915 The Cherokee Indians and their culture, history and development. The University of South Carolina, Columbia, South Carolina.

Baker, George H.

1915 The Cherokee Indians and their culture, history and development. The University of South Carolina, Columbia, South Carolina.

Baker, George H.

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Baker, George H.

1915 The Cherokee Indians and their culture, history and development. The University of South Carolina, Columbia, South Carolina.

Baker, George H.

1915 The Cherokee Indians and their culture, history and development. The University of South Carolina, Columbia, South Carolina.

Baker, George H. and Larry Brown

1941 The Cherokee Indians and their culture, history and development. The University of South Carolina, Columbia, South Carolina.

Baker, George H.

1915 The Cherokee Indians and their culture, history and development. The University of South Carolina, Columbia, South Carolina.

Baker, George H.

1915 The Cherokee Indians and their culture, history and development. The University of South Carolina, Columbia, South Carolina.

REFERENCES CITED:

- Anderson, David G.
1975 Inferences from distributional studies of prehistoric artifacts in the Coastal Plain of South Carolina. Southeastern Archaeological Conference Bulletin 18:8-11.
- Anonymous
1976 Gaston County overall economic development plan. County Economic Development Committee, Gastonia, North Carolina.
- Baker, Steven G.
1975 The historic Catawba peoples: exploratory perspectives in ethno-history and archaeology. Department of History, University of South Carolina. Prepared for Duke Power Company. Columbia.
- Binford, Lewis R.
1965 Archaeological systematics and the study of culture process. American Antiquity 31(2):203-210.
- Blythe, LeGette
1965 Robert Lee Stowe, pioneer in textiles. Heritage Printers, Charlotte, North Carolina.
- Brockington, Paul E., Jr.
1978 An archeological survey of Duke Power's Oconee-Bad Creek 500 Kv and Jocassee-Bad Creek 100 Kv transmission lines, Oconee County, South Carolina. Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 130.
- Brooks, Mark J. and James D. Scurry
1980 Excavations at 38RD158: a multicomponent prehistoric site in Richland County, South Carolina. Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 164.
- Brown, Douglas Summers
1966 The Catawba Indians: the People of the River. University of South Carolina Press, Columbia.
- Byrd, Huger S.
1963 Soil survey of Oconee County, South Carolina. U. S. Department of Agriculture, Soil Conservation Service. Washington.
- Caldwell, Joseph R.
1958 Trend and tradition in the prehistory of the eastern United States. American Anthropological Association Memoir 88.
- Caldwell, Joseph R. and Irene McCann
1941 The Irene Mound site. University of Georgia Press, Athens.
- Camp, Wallace J.
1965 Soil survey of York County, South Carolina. U. S. Department of Agriculture, Soil Conservation Service. Washington.
- Carrillo, Richard F.
1976 The Howser House and the Chronicle Grave and mass burial, King's Mountain National Military Park, South Carolina. Institute of

- Archeology/Anthropology, University of South Carolina, Research Manuscript Series 102.
- 1977 Archeological variability - socioecultural variability. In Research Strategies in Historical Archeology, edited by Stanley South, pp. 73=89. Academic Press, New York.
- Chapman, Carl F.
- 1976 The Archaic period in the lower Little Tennessee River Valley: the radiocarbon dates. Tennessee Anthropologist 1(1):1-23.
- 1977 Archaic period research in the lower Little Tennessee River Valley - 1975, Icehouse Bottom, Harrison Branch, Thirty Acre Island, Calloway Island. University of Tennessee, Department of Anthropology, Report of Investigation No. 18.
- Coe, Joffre L.
- 1964 The Formative cultures of the Carolina Piedmont. Transactions of the American Philosophical Society n.s., 54(5).
- Commonwealth Associates, Inc.
- 1980 Cultural resources survey and evaluation of US Highway 421, Siler City-Staley, North Carolina (R-2049). Jackson, Michigan.
- Cope, Robert F. and Manley Wade Wellman
- 1961 The county of Gaston. Gaston County Historical Society. Charlotte.
- Cumming, William P.
- 1966 North Carolina in maps. State Department of Archives/History. Raleigh.
- Davis, B. W. and S. N. Williams
- 1975 Crowder's Mountain State Park Master Plan. North Carolina Department of Natural Resources/Community Development, Division of Parks and Recreation, Raleigh.
- De Jarnette, David L., Edward B. Kurjak and James W. Cambron
- 1962 Stanfield-Worley Bluff Shelter excavations. Journal of Alabama Archaeology VIII(1-2):1-111.
- Dickens, Roy S.
- 1976 Cherokee prehistory: the Pisgah Phase in the Appalachian Summit region. University of Tennessee Press, Knoxville.
- Dixon, Kay
- 1955 Old homes in Gaston. In Old Homes and Historic Places of Gaston County, North Carolina. Gaston County Public Library, Gastonia.
- Drucker, Lesley M.
- 1979 Archaeological data recovery at two sites in the Jackson-Mill Creeks Watershed, Site 8 project area, Fairfield County, South Carolina. U. S. Department of Agriculture, Soil Conservation Service. Carolina Archaeological Services, Columbia.
- 1980 Archaeological investigations at Hollow Creek Watershed Site #1, Lexington County, South Carolina. U. S. Department of Agriculture, Soil Conservation Service. Carolina Archaeological Services, Columbia (in press).
- Drucker, Lesley M. and Ronald W. Anthony
- 1977 Archaeological survey of the Metropolitan Greenville area wastewater treatment facilities, Greenville County, South Carolina. Carolina Archaeological Services, Columbia.

University of California, Los Angeles
 Department of Biology
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 The following is a list of the
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- 1979 An archaeological survey of Jackson-Mill Creeks Watershed, Site 8, Fairfield County, South Carolina. U.S. Department of Agriculture, Soil Conservation Service. Carolina Archaeological Services, Columbia.
- Drucker, Lesley M., Ronald W. Anthony and Michael A. Harmon
1979 A cultural resources inventory survey for the proposed state park on Lake Hartwell, Oconee County, South Carolina. S.C. Department of Parks, Recreation and Tourism. Carolina Archaeological Services, Columbia.
- Ferguson, Leland G.
1974 Archeological investigations at the Mulberry site. Institute of Archeology/Anthropology, University of South Carolina, The Notebook VI (3-4):57-122.
1975 Mississippian period artifacts and geography. Paper presented at the meeting of the Southern Anthropological Society, Clearwater Beach, Florida.
- Gaston County Historical Society
n.d. Historic sites of Gaston County. Gaston County Public Library, Gastonia, North Carolina.
- Goodyear, Albert C., III
1978 An archeological survey of the primary connector from Laurens to Anderson, South Carolina. Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 122.
1979 A hypothesis for the use of cryptocrystalline raw materials among Paleo-Indian groups of North America. Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 156.
- Goodyear, Albert C., Neal W. Ackerly and John H. House
1980 An archeological survey of the Laurens to Anderson connector route in the South Carolina Piedmont. Institute of Archeology/Anthropology, University of South Carolina, Anthropological Studies 4 (in press).
- Griffin, James B.
1967 Eastern North American archaeology: a summary. Science 156:175-191.
- Gumerman, George J., editor
1971 The distribution of prehistoric population aggregates. Prescott College Anthropological Reports No. 1. Prescott College Press, Prescott, Arizona.
- Hemmings, E. Thomas
1970 Prehistoric subsistence and settlement on the upper Savannah River. Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 8.
- House, John H. and David L. Ballenger
1976 An archeological survey of the Interstate 77 Route in the South Carolina Piedmont. Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 104.
- House, John H. and Ronald W. Wogamon
1978 Windy Ridge, a prehistoric site in the inter-riverine Piedmont in South Carolina. Institute of Archeology/Anthropology, University of South Carolina, Anthropological Studies 3.

- Hudson, Charles M.
1976 The Southeastern Indians. University of Tennessee Press, Knoxville.
- Keel, Bennie C.
1976 Cherokee archaeology: a study of the Appalachian Summit. University of Tennessee Press, Knoxville.
- Korstian, Clarence F. and Theodore S. Coile
1938 Plant competition in forest stands. Duke University, School of Forestry Bulletin 3. Durham.
- Küchler, A. W.
1964 Potential natural vegetation of the conterminous United States. American Geographic Society Special Publication 36.
- Lawson, John
1714 Lawson's History of North Carolina [edited by Frances L. Harriss, 1952]. Garrett & Massie, Richmond, Virginia.
- Lowman, D. W. and S. L. Sheaton
1970 Archaic soapstone quarries in upper South Carolina. Institute of Archeology/Anthropology, University of South Carolina, The Notebook II(6-7):6.
- Marrinan, Rochelle
1975 Ceramics, molluscs, and sedentism: the late Archaic period on the Georgia coast. Ph.D. dissertation, Department of Anthropology, University of Florida. University Microfilms.
- Metzger, J. Bradley and John W. Lesesne
1975 Final Environmental Impact Statement for the Crowder's Mountain State Park Master Plan. Department of Natural and Economic Resources, Division of Parks and Recreation. Raleigh, North Carolina.
- Michie, James L.
1977 The Late Pleistocene human occupation of South Carolina. Unpublished Senior Thesis, Department of Anthropology, University of South Carolina. Columbia.
- Mills, Robert
1825 Atlas of the state of South Carolina. F. Lucas, Baltimore.
1826 Statistics of South Carolina. Hurlbut and Lloyd, Charleston.
- Munsell, Alfred H.
1969 A grammar of color [plus soil color charts]. Van Nostrand Reinhold, New York.
- Perkinson, P. H.
1973 North Carolina fluted projectile points survey report, Number 2. Southern Indian Studies 5:3-58.
- Phelps, David S.
1964 The final phases of the eastern Archaic. Ph.D. dissertation, Department of Anthropology, Tulane University. University Microfilms.
- Puett, Minnie Stowe
1939 History of Gaston County. Observer Printing Office, Charlotte, North Carolina.

- Reid, J. Jefferson
1967 Pee Dee pottery from the mound at Town Creek. M.A. thesis, Department of Anthropology, University of North Carolina, Chapel Hill.
- Ryan, Thomas M.
1971 Test excavations at the McCollum site, 38CS2, July 12-30, 1971. Institute of Archeology/Anthropology, University of South Carolina, The Notebook III(50):104-110.
- Shelford, Victor E.
1963 The ecology of North America. University of Illinois Press, Urbana.
- South Stanley A.
1972 The unabridged version of "Tribes of the Carolina Lowlands." Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 20.
1976 Indian pottery taxonomy for the South Carolina coast [revised]. Institute of Archeology/Anthropology, University of South Carolina, The Notebook VIII:28-29.
- Stephenson, Robert L.
1975 An archeological preservation plan for South Carolina. Institute of Archeology/Anthropology, University of South Carolina, The Notebook VIII(2-3):41-109.
- Stoltman, James B.
1974 Groton Plantation: an archaeological study of a South Carolina locality. Harvard University, Peabody Museum Monographs 1.
- Sutherland, Donald R.
1974 Excavations at the Spanish Mount shell midden, Edisto Island, South Carolina. South Carolina Antiquities VI(1):25-36.
- Trimble, Stanley W.
1974 Man-induced soil erosion on the southern Piedmont, 1700-1970. Soil Conservation Society of America, Ankeny, Iowa.
- Trinkley, Michael B.
1980 Investigation of the Woodland period along the South Carolina coast. Ph.D. dissertation, Department of Anthropology, University of North Carolina, Chapel Hill.
- United States Department of Agriculture
1973 General soil map of Gaston County, North Carolina, with soil interpretations. Soil Conservation Service, Raleigh.
- Watts, W. A.
1971 Postglacial and interglacial vegetation history of southern Georgia and central Florida. Ecology 52(4):676-690.

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- Wauchope, Robert
1939 Fluted points from South Carolina. American Antiquity 4(4):344-346.
1966 Archaeological survey of northern Georgia. Society for American Archaeology Memoir 21.
- Whitehead, Donald R.
1965 Palynology and Pleistocene phytogeography of unglaciated eastern North America. In The Quarternary of the United States, edited by H. E. Wright, Jr. and David G. Frey. Princeton University Press, Princeton.
1973 Late Wisconsin vegetational changes in unglaciated eastern North America. Quarternary Research 7:237-248. Yale University, New Haven.
- Willey, Gordon R.
1966 An introduction to American archaeology, volume 1. Prentice-Hall, Englewood Cliffs, New Jersey.
- Williams, Robert L.
1980a Lost city discovered in Gaston. The Charlotte Observer, February 26.
1980b The search for Ulricksburgh. The State Magazine, April.
- Yarnell, Richard A.
1976 Cultigen prehistory in the Southeast. In Handbook of North American Indians, edited by Stuart Struever.

1911
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and the crops were very poor.

The second of the year was a very wet one
and the crops were very good.

The third of the year was a very dry one
and the crops were very poor.

The fourth of the year was a very wet one
and the crops were very good.

The fifth of the year was a very dry one
and the crops were very poor.

SCOPE OF WORK

For Archeological Surveys Within Proposed Development Areas Managed
in the North Carolina State Park System1. General

In accordance with federal and state legislation, the North Carolina Department of Natural Resources and Community Development, Division of Parks and Recreation is required and authorized to have conducted archeological resource inventory and evaluation surveys of areas selected for recreation facility development and/or improvement. "Archeological resource" herein refers to any prehistoric or historic property of an archeological nature. Inventory and evaluation of archeological resources within Division property is to be undertaken with respect to the significance criteria established for the National Register of Historic Places. The legislative base for such work is found in section 106 of the National Historic Preservation Act of 1966 (PL 89-665), the National Environmental Policy Act of 1969 (PL 91-190), the Advisory Council's Procedures for the Protection of Historic and Cultural Properties (36 CFR Part 800), the North Carolina State Environmental Policy Act of 1971 (G.S. 113A), and the North Carolina State Executive Order XVI of 1971. Archeological research is compatible with the aforementioned; however, such work should comply with the Society of Professional Archeologists Standards of Research Performance.

2. Project Description (see Request for Proposals, Exhibit A)3. Description of Work

The contractor shall conduct literature and background research, records review, and field investigations of sufficient intensity to locate and evaluate archeological resources in the study area described in Part 2 of this Scope of Work. A preliminary report is to be submitted following the conclusion of the field investigation, with the final report to be submitted following data analysis, synthesis, and evaluation.

A. Literature and Background Research. Prior to initiation of the field investigations the Contractor shall undertake literature and background research sufficient to acquire a working familiarity with the natural and cultural developments in the study area(s). This research shall include but not be limited to:

- (1) consultation with the North Carolina State Historic Preservation Officer (hereafter the SHPO) and any professional archeologists familiar with the general study area;
- (2) examination of all reports of investigations of cultural resources in the study area;
- (3) examination of all listings of historic and prehistoric properties in the study area, including county courthouse records and the National Register of Historic Places and its supplements;
- (4) consultation with knowledgeable local individuals and state and local historical and archeological societies; and
- (5) examination of site files of the University of North Carolina at Chapel Hill and the North Carolina Division of Archives and History, Archeology and Historic Preservation Section in Raleigh.

B. Field Inspection. In addition to the literature and background research, the Contractor shall have prepared a survey plan or strategy prior to initiation of the field inspection. This plan shall include provisions for survey of an intensity sufficient to determine the nature, extent, and significance of any and all archeological resources (historic and prehistoric) within the areas of proposed development.

The methods and techniques used in meeting the above shall be of the Contractor's choosing, but should reflect a thorough working knowledge of contemporary archeological methods and techniques. Of particular importance in this regard is a working knowledge of methods of locating and evaluating buried archeological sites and sites located in heavily forested areas. This may include the use of structured and/or unstructured test pits, auger borings, and other methods of penetrating forest humus and top soil overburden. Such investigations shall be of a nature sufficient to supply the data herein required, but shall not progress to that of archeological excavation.

ARTICLE IV - GENERAL PROVISIONS

The Board of Directors shall have the authority to make and alter the bylaws of the Corporation, subject to the approval of the stockholders.

(1) The Board of Directors shall have the authority to make and alter the bylaws of the Corporation, subject to the approval of the stockholders.

(2) The Board of Directors shall have the authority to make and alter the bylaws of the Corporation, subject to the approval of the stockholders.

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(7) The Board of Directors shall have the authority to make and alter the bylaws of the Corporation, subject to the approval of the stockholders.

(8) The Board of Directors shall have the authority to make and alter the bylaws of the Corporation, subject to the approval of the stockholders.

(9) The Board of Directors shall have the authority to make and alter the bylaws of the Corporation, subject to the approval of the stockholders.

C. Preliminary Field Report.

Immediately upon completion of the field investigation a brief report of the findings shall be submitted to the Division of Parks and Recreation and the Archeology Branch of the Archeology and Historic Preservation Section, Division of Archives and History. This report shall contain:

- (1) fieldwork initiation and completion dates;
- (2) a preliminary identification of the numbers, types, and significance of archeological resources recorded; and,
- (3) the expected draft final report submission date (with explanations if different from that initially agreed upon by the Division of Parks and Recreation and the Contractor).

D. Final Report. Upon completion of the field investigation and data analysis and synthesis, a draft of the final report shall be submitted to the Division of Parks and Recreation and the Archeology Branch for review and comment. The Contractor shall make any required corrections of the draft report following review by the Division of Parks and Recreation and the Archeology Branch. Five (5) copies of the final corrected report shall then be submitted to the Division of Parks and Recreation. Two (2) copies of the corrected report shall also be submitted to the Archeology Branch. The report on the investigation shall include, but not be limited to, the following (after Davis and McGimsey 1977:73-74):

- (1) An abstract of the findings, conclusions, and recommendations.
- (2) A management summary, including a summary of all information which may be of use to park and recreation planners. This should include: why the work was done; a summary of the scope of work, proposal, and budget; any limitations to the investigation; the results; the significance of the results; any recommendations important to the park and recreation planning process; (to include discussion of possible impact mitigation measures and/or resource preservation techniques) and, a summary of the report contents.
- (3) A table of contents, list of illustrations and figures.
- (4) An introduction which includes discussions of the following: the history and purpose of the investigation; the individuals and organizations involved; the initiation and completion dates of the investigation; a precise description of the project location; and, where the collected materials and records are or will be curated and stored.
- (5) Discussions of the historical and prehistoric context of the study area, including a discussion of the background research methods and any previous archeological investigations.

General Field Notes

Examination of the contents of the 1000
pound barrel at the station will be made
by the Division of Agriculture and
the Department of the Interior.

1st. Examination of the barrel
will be made by the Division of
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3rd. Examination of the barrel
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4th. Examination of the barrel
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Agriculture and the Department of
the Interior.

5th. Examination of the barrel
will be made by the Division of
Agriculture and the Department of
the Interior.

- (6) Description of the effective environment, including the topography, geology, hydrology, climate, fauna, and flora as it pertains or is otherwise relevant to the cultural context of the study area.
- (7) Presentation of the project research goals and strategies, including a discussion of the Contractor's specific and/or general research objectives and theoretical orientation.
- (8) Discussion of the survey design or plan with explicit descriptions of the methods and techniques used during the survey, data collection and analysis. The Contractor's definition of "site" should be made explicit in these discussions.
- (9) Presentation and discussion of the investigation results, including a narrative description of the important sites, artifacts, and/or features recorded, and a brief description and listing of sites, artifacts and/or features of lesser importance.
- (10) Discussion of the significance of all of the recorded cultural resources and of the methods, techniques, approaches, and criteria employed in the significance evaluation process.
- (11) Discussion of the direct (or primary) and indirect (or secondary) effects of the recreation development and use project upon the cultural resources in the study area.
- (12) Presentation of recommendations and justifications to the Division of Parks and Recreation regarding any subsequent investigations of the cultural resources in the study area, accompanied by a preliminary budget estimate and schedule for accomplishing the recommended work.
- (13) Discussion of possible interpretive themes which the Division of Parks and Recreation might incorporate into an overall interpretive program.

In addition to the above, the report shall contain, appropriately located and referenced in the report discussions:

- (1) Documentation as to precise a degree as possible of:
 - (a) the total project area (in acres or hectares);
 - (b) the area and percentage of the total in cultivated field, pasture, forest, and/or residential use at the time of the survey; and,
 - (c) the area actually surveyed in cultivated fields, pasture, and/or residential use.

- (2) A scaled project base map depicting the study area with reference to important natural, political, and cultural landmarks.
- (3) A scaled map of the study area showing the location of all surveyed areas, indicating the general methods employed in those areas.
- (4) A map showing the generalized and nonspecific locations of all sites recorded during the survey.
- (5) A listing or table of all artifacts and other pertinent data collected during the survey.
- (6) Representative photographs, figures, and/or drawings of artifacts and features recorded during the survey.
- (7) A copy of this scope of work, and of the proposal and budget submitted by the Contractor (may be included as appendices).

4. Additional Provisions.

- (1) The Contractor shall be responsible for obtaining a collecting permit from the Division of Parks and Recreation prior to the onset of the project. This permit may be obtained from the Office of the Chief Park Naturalist.
- (2) The Contractor shall prepare and submit, under separate cover, specific locational data for all archeological resources recorded during the survey. To be included under separate cover are the Universal Transverse Mercator (UTM) coordinates for the approximate center point of each site, and a map or set of maps showing precise site locations and boundaries, with particular reference to the proposed development project boundaries. Two (2) copies of the maps and UTM coordinate data shall be submitted to the Division of Parks and Recreation; two (2) copies shall be submitted to the Archeology Branch.
- (3) The Contractor shall record all archeological site information identified on the site record forms developed and provided by the Archeology Branch. Two (2) copies of each completed form shall be submitted to the Archeology Branch upon termination of the contract period.
- (4) The Division of Parks and Recreation shall make available to the Contractor copies of all design plans, aerial photographs, project maps, and other information useful to the Contractor in undertaking the survey. All such materials, however, shall be returned to the Division of Parks and Recreation upon termination of the contract period.

- (5) The Contractor shall provide all materials, supplies, maps, vehicles, and personnel, other than those available solely through the Division of Parks and Recreation and otherwise noted above.

5. Oversight and Review Clause.

The North Carolina Department of Cultural Resources, Division of Archives and History, Archeology and Historic Preservation Section, Archeology Branch shall maintain the right of review and comment prior to project clearance.

6. Fiscal Responsibility.

The Contractor shall maintain for a period of three (3) years a full and accurate record of all expenditures, and shall make them available to the Division of Parks and Recreation for review upon request.

7. Curatorial Responsibilities.

The Contractor shall make the necessary arrangements for the storage and curation of all records and materials recovered during the survey. Such records and materials shall remain the sole property of the State of North Carolina; any arrangements by the Contractor must receive prior approval from the Division of Parks and Recreation and the State Historic Preservation Officer.

8. Project Schedule.

(To be established upon submission and acceptance of the Proposal for Archeological Resource Survey and Evaluation).

181 The Commission shall transmit the report
thereon, and present it, to the
Assembly, the latter to be held in
1920.

Article 18 - The Commission

The High Commission shall be composed of
three members, to be appointed by the
Assembly, one of whom shall be the President
of the Commission.

Article 19 - The Commission

The Commission shall be empowered to
investigate the facts and circumstances
of the case, and to report thereon to the
Assembly.

Article 20 - The Commission

The Commission shall be empowered to
recommend to the Assembly such
measures as it may deem fit to
take for the purpose of
preventing a recurrence of the
facts and circumstances of the case.

Article 21 - The Commission

The Commission shall be empowered to
recommend to the Assembly such
measures as it may deem fit to
take for the purpose of
preventing a recurrence of the
facts and circumstances of the case.

EXHIBIT A

Description of Project Requiring Archeological
Resource Survey and Evaluation

- 1) Project Title: Phase I Development, Crowders Mountain State Park, Gaston County, North Carolina.
- A) General Location and Environment: South Central Piedmont physiographic province of North Carolina, surface elevation range from 850 feet to 1,625 feet above MSL; poorly drained soils along the major streams to well drained soils on the slopes; pasture, cropland, and forest.
- B) Archeological-Historical Situation: No previous professional archeological surveys have been conducted in or near the project area. Projectile points have been collected by park personnel and visitors, however, suggesting the probability for prehistoric sites within the project development areas. Historic activities in the area have consisted primarily of small farming/homesteading ventures. Evidence of previous farmsteads are visible at several locations. Associated features may occur in development areas. Historic research should be conducted to provide background.
- C) Project Specifications: Proposed development includes construction of new park roads, and widening and paving of existing roads, two parking areas, one toilet building, one maintenance and service building, two group picnic shelters, water supply, wastewater disposal systems and electrical systems. The project will involve approximately 6 acres of subsurface investigation and approximately 2900 linear feet of surface walkover (along existing roads to be widened and/or graded, and paved).
- D) Survey Objectives: Locate and assess the significance of all archeological resources (historic and prehistoric) within the proposed development areas. Make any and all recommendations for subsequent actions necessary for preserving significant resources or otherwise mitigating unavoidable adverse impacts to those resources.

Three development areas are defined for the project. Investigations in these areas shall include, at a minimum, the following:

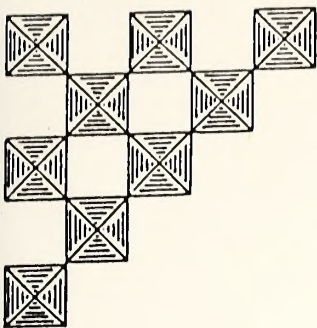
- (1) Maintenance building site and road: Walkover of road slated for widening; subsurface investigation of area slated for building construction.
- (2) Park Office road and parking: Walkover of road slated for widening; subsurface investigation of area slated for building construction.

Continuation of Project Report No. 1-5-1
Research Survey and Report

- 1) Project Title: [Illegible]
- 2) [Illegible]
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- (3) Picnic area: Subsurface investigations of entire area (presently in forest). Specific attention should be paid to possible historic archeological features, including possible house site and old farm roadbed.

(1) This is a preliminary investigation of the
possibility of using the results of the
investigation in the field. The results of the
investigation are as follows:



carolina

archaeological

services

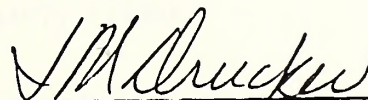
*ARCHAEOLOGICAL SURVEY AND EVALUATION OF PROPOSED RECREATION DEVELOPMENTS
CROWDERS MOUNTAIN STATE PARK
Gaston County, North Carolina*

PROPOSAL FOR ARCHAEOLOGICAL SERVICES

Submitted To
North Carolina Department of Natural Resources
and Community Development

August 1980

*A Woman Owned Small Business Partnership
An Equal Opportunity Employer*



Lesley M. Drucker
Contract Director

PROPOSAL FOR ARCHAEOLOGICAL SERVICES

Project: Proposed Recreational Developments
Crowders Mountain State Park, Gaston County

Sponsor: North Carolina Department of Natural Resources and
Community Development
Division of Parks and Recreation

Date: August 8, 1980

ABSTRACT

A proposal for intensive archaeological survey and evaluation for potential cultural resources is hereby submitted to the North Carolina Department of Natural Resources/Community Development, Division of Parks and Recreation (PR) for services consideration relative to a proposed state development project at Crowders Mountain State Park (Gaston County). All project items addressed in the Scope of Work provided by NCPR are covered in this proposal.

The professional consultation, research, fieldwork and reporting proposed herein will synthesize the results of archaeological survey and field testing, documentary and literature search and artifact analysis to evaluate the cultural resource potential of approximately six acres and 2,900 linear feet of proposed visitor use and vehicle access areas within the park property. All work to be performed under the terms of this procurement will be done in accordance with federal requirements concerning non-renewable cultural resources, specifically Section 106 of the National Historic Preservation Act (Public Law 89-665), N. C. State Executive Order SVI, Procedures for the Protection of Historic and Cultural Properties (36 CFR 800) and Guidelines for the Recovery of Scientific, Prehistoric and Archaeological Data (36 CFR 60.6), and the North Carolina State Environmental Policy Act (G.S. 113A).

The field design will be based on 100% coverage of the proposed development areas, which include existing dirt access roads, open succession areas and wooded areas (three separate development loci). Field methods will include general pedestrian walkover survey, manual raking (clearing), systematic (standardized) unit subsurface testing, and systematic deep testing by bucket augur within alluvial or colluvial deposits, wherever appropriate. Intensive testing at identified site locations will proceed according to a systematic unit subsurface testing design (limited testing). Soil screening will be used for all tests, and all located sites will be clearly flagged for relocation by NCPR.

All project-related work will be conducted by the experienced staff and employees of Carolina Archaeological Services. Consultants with expertise

GENERAL INFORMATION

Project:

Investment in the construction of a new building for the purpose of housing the research and development department of the company.

Location:

Plot No. 12, Industrial Estate, near the airport, District of West London.

Date:

15th March 1965

Author:

A. J. Smith

A preliminary investigation has been carried out to determine the feasibility of the proposed project. The results of this investigation are set out in this report. The project is considered to be feasible on the basis of the information available at present. The estimated cost of the project is £100,000. The estimated revenue from the project is £120,000. The estimated profit from the project is £20,000. The project is considered to be a worthwhile investment.

The project is considered to be a worthwhile investment. The estimated cost of the project is £100,000. The estimated revenue from the project is £120,000. The estimated profit from the project is £20,000. The project is considered to be a worthwhile investment.

All figures are estimates and will be confirmed by the company's accountants.

in soil science, faunal and botanical identification and analysis, and geology will provide project services as needed. All artifacts collected during the course of the proposed investigations will be temporarily curated by Carolina Archaeological Services until permanent curation arrangements have been made by NCPR. All artifacts and original site forms/inventory sheets will permanently reside in North Carolina.

The project will be completed within a ceiling estimated budget of \$750.00 for a total of 7.5 person days.

SUBMITTING ORGANIZATION

Carolina Archaeological Services (CAS) is a woman-owned Small Business Partnership (Equal Opportunity Employer) with central offices located in Columbia, South Carolina. The company was founded in 1977 and operates with a staff capability of at least ten field, technical, laboratory, administrative and clerical personnel. Consultant expertise which is readily available in North Carolina, South Carolina and Georgia includes geology, culture-historical geography, history, architectural history, soil sciences, biology, engineering, paleoecology, museology, conservation, human osteology and cultural resource management. CAS has successfully competed for all levels of cultural resource study projects, including state survey and planning, data recovery and general management consultation. CAS has worked in conjunction with public administrative agencies as well as with private agents and organizations on over 35 contract and grant projects in the southeastern United States. The company maintains full-time laboratory, field and clerical support services, as well as equipment and vehicles necessary to the performance of archaeological consulting services.

PROJECT PERSONNEL

Project principals of CAS have a cumulative total of over 20 years experience in prehistoric and historic archaeology (research and methods) and have worked extensively with the research problems, field designs and environmental contexts characteristic of the Piedmont, Fall Line and Coastal Plain physiographic provinces of North Carolina, South Carolina, Georgia, and Louisiana as well as with special sub-regional aspects of these areas. Individual research by members of the company also includes prehistoric and ethnohistoric research on the Cherokee cultural subarea of western North Carolina/eastern Tennessee/northeast Georgia, and on plantation slave socioeconomic systems.

Staff personnel have extensive prior experience in formulating, evaluating and operationalizing realistic research and field strategies, research models, analytical programs and assessment reports at all levels of archaeological endeavor. CAS has recently completed Piedmont contract research in the Hollow Creek Watershed area (Lexington County, South Carolina), Lake Hartwell-Oconee State Park area (Oconee County, South Carolina), Jackson-Mill Creeks Watershed area (Fairfield County, South Carolina), City of Greer (Greenville County, South Carolina) and Town of Gaffney (Cherokee County, South Carolina). The company is currently undertaking intensive archaeological investigations within the Richard B. Russell Multiple Resource Area (upper Savannah River) in Abbeville and Anderson Counties, South Carolina. Prior Piedmont studies in the northwestern sector of South Carolina have also included the metropolitan Greenville area and the Lake Keowee area (Pickens and Pendleton Counties). These project areas encompass a range of environmental situations and conditions which typify

those projected for the proposed Crowders Mountain project area. In addition, staff members have extensive knowledge of the historical settlement background and ethnohistoric Indian background of the Kings Mountain/Charlotte area.

The designated Principal Investigator for the proposed investigations will be Lesley M. Drucker. Ms. Drucker will provide overall direction and management during the project and will participate in planning the research design and field methodology, as well as coordinating the research/data synthesis and report preparation. She will serve as liaison between the contractor and NCPH, and has a current cooperative working relationship with both the Archaeology Branch (North Carolina Division of Archives and History) and with the North Carolina Archaeological Council.

Mr. Ron Anthony will serve as the on-site field director (Field Archaeologist) for the project, and will supervise and participate in the entire field survey, laboratory recording and analysis, research and report preparation. Mr. Anthony has over five years of archaeological experience in North Carolina, as well as a current working relationship with members of the North Carolina Archaeological Council and first-hand knowledge of the project vicinity.

The project principals listed above meet professional standards as required by 36 CFR 60.6, are members of the Society of Professional Archaeologists and of the Council of South Carolina Professional Archaeologists.

CONSULTANTS

Macro-biotic specimens which may be recovered from stratified (excavated) contexts during the proposed investigations will be submitted for identification and analysis to professional individuals trained in providing such services. Botanical and/or faunal materials will be studied by Dr. Andrew N. Ash (Biology Department, East Carolina University) or by Dr. Michael B. Trinkley (Staff Archaeologist, S. C. Department of Highways/Public Transportation) and/or Dr. Jeanette Runquist (Biology Department, Winthrop College). All of these consultants have extensive prior training and field experience in North Carolina.

If appropriate, soil samples from cultural features will be collected for pH, nitrogen and/or phosphorus analysis by Carr and Associates (Columbia) or by Walker Laboratories (Columbia). If sediment particle analysis appears productive as an adjunct to either ceramic or stratigraphic study, these services will be provided by Walker Laboratories.

PROJECT BACKGROUND AND LOCATION

The proposed visitor access, recreational and sanitary facilities at Crowders Mountain State Park will expand public usage of the state park system within the central North Carolina Piedmont. New roads (or expansion of existing roads), parking areas, maintenance and residence structures, restroom facilities and administrative offices are anticipated for construction. These developments will encompass approximately six acres and 2,900 linear feet of survey area.

The project area is located in the extreme southwestern area of the state. Surface elevations range from 850 - 1,625 feet above mean sea level, with slopes moderate to steep. The access roads will be oriented roughly perpendicular to slopes, while permanent facilities will be located on ridge tops, saddles or gentle upper slopes. Soils within the project area are somewhat

poorly drained along the major streams and well drained along slopes and ridge tops. The majority of visitor usage facilities will be located north of a recreational lake. It is expected that erosion of the A± and Ap soil horizons within the survey areas will be moderate to severe along the access roads, with possibly better soil preservation on broad ridge tops. Vegetation in the project area is dominated by pine (longleaf and loblolly), with secondary hardwood understory in some areas; forests within the area are in various stages of maturity and have been logged during the historic period. The park encompasses lands in pasture, crops and secondary forest; most of the proposed survey areas are currently wooded.

The Piedmont is characterized by hilly terrain dissected by dendritic stream drainages. The project area is located within a Rank 1 drainage area of the upper Catawba River system.

DESCRIPTION OF SERVICES

The following brief outline represents the basic service orientation which will structure project goals and methods in fulfillment of this procurement. In conducting these services, CAS will comply with all reasonable provisions of the NCPR Scope of Work and/or of subsequently identified needs approved by NCPR which can be incorporated within the contract time and funding schedules.

The primary goal of the contract research will be the location, identification and evaluation of cultural resources contained within the defined direct impact zones of the proposed facilities construction, as well as an evaluation of direct project impact to identified and potentially eligible sites and an evaluation of projected secondary development impacts. Evaluation will cover standing architectural structures and/or remnants within the impact zone, prehistoric and historic non-structural sites, and other cultural features which can be identified.

Services to be performed by the contractor include:

A. A thorough literature and background search (overview) of historic and prehistoric resources within the geographical area encompassing the proposed state park development. The major existing records of investigations within the project vicinity will be located at Catawba College and/or the University of North Carolina-Chapel Hill and -Charlotte. The Archaeology Branch will also be consulted concerning historic structure surveys. No National Register properties are currently listed or determined eligible within the state park boundaries. Other local records, historical syntheses, professional and/or amateur historians and archaeologists and resident laymen knowledgeable about the project area will be consulted concerning potential cultural resources in the project area.

No previous professional archaeological surveys have been conducted in or near the project area. Visitors and park personnel have collected projectile points within the park, indicating that prehistoric utilization can be expected. Historic activities in the area have consisted primarily of small farming and homesteading ventures. Features associated with a dispersed pattern of settlement and economic activities may occur in project development areas. It is expected that evidence of 18th to early 19th century Euro-American occupation will reflect a frontier settlement pattern (Lewis 1977, 1980).

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B. An intensive 100% coverage of approximately six acres and 2,900 linear feet of proposed development area by pedestrian survey and subsurface testing to locate, identify and evaluate prehistoric and historic cultural resources. This service will be accomplished through vector pedestrian survey in open areas, general pedestrian walkover in exposed and disturbed ground areas, interval ground surface raking in lightly forested areas and systematic subsurface testing in areas of poor ground surface visibility (heavy forestation).

C. Assessment of the research potential contained in the historic and prehistoric properties which are located by the survey, according to the criteria established by 36 CFR 800 for local, state or national site significance (National Register eligibility criteria). This assessment will necessitate the recording of basic site parameters, including site size, depth, integrity, componentry, environmental and spatial contexts, and relative contribution to anthropological science or architectural history. In making these evaluations, reference will be made to a data redundancy factor relative to the immediate vicinity.

D. Evaluation of direct and (wherever determinable) secondary project-related impact to identified cultural properties. Evaluation will be presented as approximate percentages of the site to be impacted, and a definition of the form of the impact.

E. Recommendations with justification for either termination of investigations at cultural properties (outside project boundaries or ineligible for the National Register) or mitigation of anticipated adverse effect to potentially eligible sites. Mitigation alternatives will be discussed (preservation in place or intensive investigation) when the proposed project threatens the integrity of an identified property.

F. Documentation of all field investigations, to include maintenance of field and photographic logs, profiles, features and site sketches, site forms and artifact inventories. Descriptive findings will be presented in a final report on the investigations.

RESEARCH DESIGN AND PROJECT GOALS

The basic applied research goal of the intensive survey of approximately six acres and 2,900 linear feet of proposed state development facilities will be to collect data concerning (1) the co-occurrence of site types (defined operationally on the basis of artifact content and density estimates), landforms, vegetative communities and water sources (reconstructive model) for the pre-historic period, and (2) relative densities (geographic occurrence) of domestic, industrial, military and/or commercial site types during the historic period (mid 18th century to the present). For purposes of this survey, a site will be defined as "any locus reflecting human occupation or utilization," reflected by the presence of the material by-products of that occupation or utilization. "Sites" will include artifact scatters (at least two artifacts within a one-quarter acre area), features, structures and structural remnants.

The research orientation which will affect the field methodology and data collection techniques of the proposed intensive survey investigation is the collection of distributional (descriptive) data concerning the temporal and functional dimensions of human settlement history and human geography within the project area, and to relate this distribution to a broader context of inter-riverine and riverine Piedmont research on subsistence and settlement

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systems. This topic has received more emphasis under an informal state research plan in South Carolina than in North Carolina, and has produced several interesting and testable hypotheses (House and Ballenger 1976; Goodyear 1978; House and Wogamon 1978; Drucker, Anthony and Harmon 1979). A corollary of the research will be to derive a site density estimate for the project area, which may be useful in comparing different segments of the park under similar topographic and environmental conditions.

During an intensive archaeological survey of a 600-acre project area for the proposed Oconee State Park on Lake Hartwell, South Carolina, CAS research focused on correlating prehistoric site components and types with slope elevation, slope direction and distance from a permanent water source (ranked stream). A corollary research question concerned lithic procurement and usage patterns at located sites within this upper Piedmont area. The proposed survey of the Crowders Mountain State Park project areas would be able to consider similar types of questions concerning past land use and changes in subsistence, settlement and procurement behavior during the prehistoric period, although the survey would produce distributional data of limited applicability to probabilistic models or statements.

METHODOLOGY

The research and field strategy to be employed under the presently proposed investigations reflects a combination of successful surface and subsurface investigative techniques which CAS has implemented under environmental and topographic conditions identical to those characterizing the proposed Crowders Mountain State Park project areas. These techniques are intended to discover and evaluate occupational loci through systematic pedestrian vector survey, general walkover survey and systematic subsurface testing.

A. Literature Search - Prior to initiating the field study, an extensive search of available literature and records concerning prehistoric and historic resources within the project vicinity will be conducted. Primary sources will include site files and records of the Archaeology Branch, UNC-Chapel Hill and UNC-Charlotte. Additional property and regional research will be conducted at the local county courthouse, library and soil conservation office. Local informants knowledgeable about the project area's history and/or site distribution will also be consulted, including state park personnel.

B. Field Survey and Testing - The field survey will be designed to intensively cover the entire project area. Approximately 25% of each of three project area loci is developed (dirt roads), with the remainder largely in forest.

In areas of good ground surface visibility (at least 50%), either a general walkover survey or systematic vector survey will be implemented, depending upon the size and condition of the particular area. Other open areas (pasture) will be subjected to systematic (parallel) vector survey (compass vectors), with two surveyors placed approximately 10 - 30 meters apart, depending upon ground cover conditions. In areas of observed artifact concentrations, the interval between surveyors will be narrowed to intensify survey coverage. Depending upon the nature of artifact clustering, collection methods will include total ("grab") collection, limited collection (diagnostics plus a range of visible artifact types) or systematic collection (gridded or radial units). Limited subsurface testing will be conducted in pastures and clearcut

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areas if appropriate.

Since ground surface cover is expected to be variable within the forested areas of the project impact zones, a combination of pedestrian walkover survey (along existing access roads), manual raking at intervals (lightly covered ground areas) and systematic subsurface testing (heavily littered or obscured ground areas) will be used to adequately assess the resource potential of these sections. Testing in wooded areas will follow roughly parallel compass vectors approximately 15 - 30 meters apart; interval testing will occur at approximately 15 - 30 meter intervals along each vector. Test units will consist of either one-half square meter shovel tests and/or four-inch diameter bucket augur tests. All tests will be excavated at least to sterile subsoil. Augur testing will extend a maximum of two meters below the ground surface. All excavated soils will be sifted through 1/4-inch hardware cloth (mesh) to recover artifacts and macro-biotic remains; materials will be bagged and labeled according to horizontal and vertical provenience. Soil samples will also be collected from excavated contexts within the project corridors.

At sites identified within areas of poor ground surface visibility, coverage will be intensified to the degree necessary to obtain the necessary descriptive information relative to assessment of site significance. Subsurface testing will proceed systematically using one-half square meter or one square meter units which radiate at 60° angles from a designated center point within the defined site area. Intervals between tests on each radial will range from 10 - 15 meters, depending upon the nature of the site and ground surface visibility between tests. Testing will be discontinued after two consecutive sterile tests. Radial testing will produce in effect an "artifact contour" map which defines effective site limits.

Supplemental ground surface inspection in all areas to be surveyed will include periodic surface clearing through manual raking and examination of all fortuitously exposed ground areas, including access roads, logging roads, gullies, upturned trees, animal burrows, spoil piles, clearcut areas, ditches, livestock trails, colluvial deposits and lake banks. Raking will clear a maximum of two meters in diameter.

In summary, site discovery techniques will include both surface and subsurface ground inspection, using a combination of systematic, intuitive and fortuitous methods. Specific site testing will follow a systematic unit placement design, using shovel tests and/or augur tests, along with screening.

Records of all test units, test vectors and significant environmental features will be maintained. Maps of sites and site relationships will be prepared as appropriate. Soil samples will be described in Munsell color terminology. All artifacts collected during the survey will be discussed or referenced in the final report of findings. A brief management summary will provide a tabular presentation of all located sites, impact projections, site evaluations and mitigation or clearance recommendations.

C. Laboratory Processing, Recording and Analysis - All archaeological materials collected in the field will be transported to Columbia, South Carolina, where they will be cleaned, stabilized and temporarily curated at the CAS laboratory until permanent curation arrangements have been made. Macro-biotic samples which may be collected will be submitted for identification and analysis

to professional consultants (see "CONSULTANTS").

Artifact analysis will focus on typological classifications (culture-historical components) and tentative functional classifications (lithic tool types by edge wear and tool or tool by-product morphology; ceramic types by surface decoration and treatment, temper [prehistoric only], glaze and paste characteristics [historic only]; other artifacts by morphological interpretive inference). Assemblages from different sites will be compared to determine general trends and/or patterns for artifact type frequency, lithic raw material frequencies, overall artifact densities, spatial associations (feature recovery vs. isolated occurrence), and for correlative patterns of association between site type, temporal period and environmental (natural and culture-historical) contexts.

The primary goals of the analysis will be as follows:

- A. Determination of occupational components represented within the project area.
- B. Spatial association of components (discrete vs. overlapping).
- C. Discernment of horizontal and/or vertical stratigraphy at identified properties.
- D. Discernment of patterned relationships between environmental factors, site location and temporal components.
- E. Identification of prehistoric and historic tool types and inferences concerning site (functional) types; tentative site type definition based on artifact assemblage and site context.
- F. Inferences concerning changes in land use (particularly elevation, landform, slope direction and distance from water) during the prehistoric and historic periods.
- G. Inferences concerning projected site density within similarly located areas within the Crowders Mountain State Park.

REPORT PREPARATION

The following reporting procedures will be followed by the contractor:

- A. Management Summary - Two (2) copies of an interim report will be submitted to the Division of Parks and Recreation within fifteen (15) days of completion of fieldwork. This brief summary of investigations and recommendations will provide NCPR and the Archaeology Branch with 1) fieldwork initiation and completion dates, 2) a preliminary identification of the numbers, types and significance of archaeological resources recorded and evaluated, and 3) the expected submission date of the final draft report.
- B. Final Report - By a date to be negotiated following completion of the field investigation, data analysis and synthesis, two (2) copies of a draft final report will be submitted to the NCPR for review and comment by the NCPR and by the Archaeology Branch. Following review and revisions, CAS will provide NCPR with seven (7) copies of the final bound report. The final report will consist of the complete results of the background and literature search, as well as the detailed findings of the intensive field survey and analyses. All standards of reporting and formatting specified by 36 CFR 60 and The Airline House Report will be followed. The final report will contain the following minimum data:

1. Abstract.
2. Management summary.

3. Environmental and cultural overviews.
4. Description and discussion of project methodologies, goals and research design; results of background research; limitations encountered in field and in adequacy of data and/or survey methodology.
5. Discussion of project results; presentation of site descriptions, maps, component distributions, results of analyses; discussion of research significance of findings; research comparisons; site assessments; impact assessments.
6. Summary of findings and recommendations; cost estimate of recommended mitigation alternatives.
7. References cited; appendices (original descriptive data).
8. Statement concerning disposition of field records, laboratory records and artifacts.
9. Statement concerning possible interpretive themes which the NCPR might incorporate into an overall interpretive program for public benefit.

In addition, the body of the final report will state the total project area covered, the vegetative condition of the survey area (percentages of land use), and the amount of land area actually covered by the survey techniques. Project maps will locate all recorded sites, all surveyed areas, and the project area in relation to the geographical, natural, political and cultural vicinity. The appendix will contain a summary artifact inventory by site (including isolated finds). Graphics contained within the body of the report will contain photographs, profile sketches, site maps, and/or artifact drawings, as appropriate to the discussion.

GENERAL PROCEDURES

The contractor will comply with all relevant stipulations and conditions applicable and specified under the Scope of Work (Section 4), and will maintain coordination with a designated official of the Division of Parks and Recreation and with Division archaeologists of the Archaeology Branch. Basic graphic and environmental descriptive materials relative to this project will be provided by NCPR. Access to the property will be provided by NCPR, and CAS will be responsible for obtaining a collecting permit from NCPR prior to the field survey. NCPR officials' knowledge concerning the project will be available to the contractor for office or field consultation before and during the project if needed.

Other specifications of the Scope of Work (Sections 5 through 8) will be understood and followed by the contractor.

The contractor will conduct all background and field research according to the major strategy and design outlined in this proposal. Minor changes, scheduling shifts and tactical specifications will be made on-site during the survey as needed according to the professional discretion of the contractor. All work will be completed within the timetable outlined below, except in the case of poor weather or access problems. Major changes in either the scope of work or the scheduled survey activities will be cleared through either the NCPR and/or the contractor prior to implementation by either party.

Carolina Archaeological Services will perform the required consultant services under a firm fixed fee contract arrangement, with invoicing to be processed on a task completion basis (incremental). Payments will be considered net due WITHIN THIRTY (30) DAYS of the client's receipt of invoice. A project

estimate is attached and made a part of this proposal.

PROJECT SCHEDULING

A total of five (5) actual work days are projected for completion of project tasks as outlined in this proposal. Concurrent performance of certain duties is anticipated by two project personnel. Two (2) person-days are allotted for completion of a literature/documentary/archival search relative to the cultural, historical and environmental background of the project area. Two (2) person-days will be allowed for the field survey, and an additional two (2) person-days are allotted for processing, recording and analyzing field, background and comparative research data. Report preparation will be completed within one (1) person day. The projected work period encompasses a total of 7.5 person-days, and would be scheduled to begin within 12 days after notification to proceed.

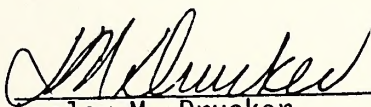
TASK	PERSONNEL	WORK DAYS	PERSON DAYS
Project Planning	PI	2 hrs.	
	Field Arch.	2 hrs.	.5
Background/Literature Search	Field Arch.	1 day	
	Res. Asst.	1 day	2.0
Fieldwork	Field Arch.	1 day	
	Res. Asst.	1 day	2.0
Lab Proc./Rec./Analysis	*Field Arch.	1 day	
	*Res. Asst.	1 day	2.0
Report Preparation	Field Arch.	1 day	1.0

	TOTAL WORK DAYS	5 days	
	TOTAL PERSON DAYS		7.5

* Not necessarily concurrent tasks.

ENDORSEMENT:

CAROLINA ARCHAEOLOGICAL SERVICES


Lesley M. Drucker
Contract Director

8/8/80
Date

REFERENCES CITED:

- Drucker, Lesley M., Ronald W. Anthony and Michael A. Harmon
1979 A cultural resources inventory survey for the proposed state park on Lake Hartwell, Oconee County, South Carolina, Prepared for use by South Carolina Department of Parks, Recreation and Tourism. Columbia.
- Goodyear, Albert C., III
1978 An archeological survey of the primary connector from Laurens to Anderson, South Carolina. Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 122. Columbia.
- House, John H. and David L. Ballenger
1976 An archeological survey of the Interstate 77 Route in the South Carolina Piedmont. Institute of Archeology/Anthropology, University of South Carolina, Research Manuscript Series 104.
- House, John H. and Ronald W. Wogamon
1978 Windy Ridge: a prehistoric site in the inter-riverine Piedmont in South Carolina. Institute of Archeology/Anthropology, University of South Carolina, Anthropological Studies 3.
- Lewis, Kenneth E.
1977 Sampling the archaeological frontier: regional models and component analysis. In Research Strategies in Historical Archeology, edited by Stanley South, pp. 151-201. Academic Press, New York.
1979 Settlement pattern and functional variation on the South Carolina frontier. Conference on Historic Site Archaeology Papers, 1978 13:228-237.

CAROLINA ARCHAEOLOGICAL SERVICES

Archaeological Survey and Evaluation of Proposed Recreational Developments
Crowders Mountain State Park, Gaston County, North Carolina

N. C. Department of Natural Resources/Community Development

COST ESTIMATE

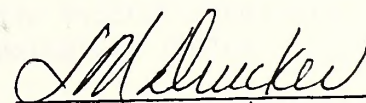
I. PROFESSIONAL FEES

Literature/Background Research			
Field Archaeologist - \$56/day	1 day	\$	56.00
Research Assistant - \$38/day	1 day		38.00
Fieldwork			
Field Archaeologist	1 day		56.00
Research Assistant	1 day		38.00
Lab Processing/Recording/Analysis			
Field Archaeologist	1 day		56.00
Research Assistant	1 day		38.00
Report Preparation			
Field Archaeologist	1 day		56.00
		\$	338.00
	INDIRECT COSTS - 65%		220.00
SUBTOTAL I		\$	558.00

II. DIRECT COSTS

Mileage - \$.19/mile	275 miles	\$	52.00
Per Diem - \$38/day/double	1 day		38.00
Xerox - \$.15/copy (institutional)	50 copies		8.00
\$.022/copy (CAS)	175 copies		4.00
Graphics/Printing/Binding			50.00
Typist - \$5.00/hr.	8 hours		40.00
SUBTOTAL II		\$	192.00
(SUBTOTAL I)			558.00
GRAND TOTAL		\$	750.00

THIS COST ESTIMATE HAS BEEN PREPARED AND APPROVED BY CAROLINA ARCHAEOLOGICAL SERVICES.


Lesley M. Drucker
Contract Director

LESLEY M. DRUCKER
Senior Archaeologist

Background in archaeological research and field investigations, historical research, teaching, implementation of cultural resource management compliance procedures, surveys, testing and excavations in South Carolina, North Carolina, Georgia and Louisiana.

EXPERIENCE:

1977 to Present

Carolina Archaeological Services (1977 -)
Archaeologist and Principal Investigator involved in research and proposal design, field investigations, evaluation, project management and administration on projects for governmental and industrial clients. Involved with cultural resources inventory of Myrtle Beach Air Force Base, South Carolina (Department of Defense); Pinckney Island and Savannah National Wildlife Refuges, South Carolina (U. S. Fish and Wildlife Service); Millen and Chattahoochee Forest National Fish Hatcheries, Georgia (U. S. Fish and Wildlife Service); and Richard B. Russell Dam and Lake project, South Carolina and Georgia (U. S. Army Corps of Engineers); and Brookgreen Gardens, South Carolina (U. S. Department of the Interior/S. C. Department of Archives and History). Intensive testing and data recovery project involvement to date includes Site 8, Jackson-Mill Creeks Watershed, South Carolina (U. S. Department of Agriculture/Soil Conservation Service); Spiers Landing Recreational Area, South Carolina (Heritage Conservation and Recreation Service); Laurel Hill plantation site, South Carolina (U. S. Fish and Wildlife Service); and the Augusta Railroad project area, Georgia (Georgia Department of Transportation).

1975

University of South Carolina (Columbia). Part-time Instructor of Anthropology, Department of Anthropology. Involved with preparation of instructional materials for introductory anthropology and archaeology courses - course load, 3.

1975

South Carolina State Museum Commission (Columbia). Exhibit Designer under contract to develop mobile instructional kits on three anthropological topics.

1975

University of South Carolina (Columbia). Research Associate, Department of Anthropology, Field School, Edisto Island Shell Mound (Charleston County). Supervision and excavation.

LESLEY M. DRUCKER (continued)

EDUCATION:

B. A. summa cum laude, Anthropology, University of South Carolina, 1972.
M. A., Anthropology, Tulane University, 1974.
Ph.D. (expected 1980), Anthropology (Archaeology), Tulane University.
Field School in Archaeology, East Carolina University (Greenville, North Carolina), 1974.

PROFESSIONAL
AFFILIATIONS:

Society for American Archaeology
Southeastern Archaeological Conference
National Trust for Historic Preservation
Society of Professional Archaeologists
Southern Anthropological Society
Florida Anthropological Society
South Carolina Council of Professional
Archaeologists (Vice President)
Archeological Society of South Carolina, Inc.
(Newsletter Editor 1976 - 1979)

PUBLICATIONS:

"Socioeconomic Patterning at an Undocumented Late 18th Century Lowcountry Site: Spiers Landing, South Carolina." Historical Archaeology, in press.

Co-author with Ronald W. Anthony, "A Cultural Resources Inventory of Myrtle Beach Air Force Base, Myrtle Beach, South Carolina." U. S. Department of Defense, Myrtle Beach Air Force Base, HCRS Contract No. C-5976(79). 1980.

Co-author with Ronald W. Anthony and Michael A. Harmon, "A Cultural Resources Inventory Survey for the Proposed State Park on Lake Hartwell, Oconee County, South Carolina." Prepared for use by the South Carolina Department of Parks, Recreation and Tourism through Davis and Floyd Engineers, Inc. 1979.

Co-author with Ronald W. Anthony, "A Cultural Resources Survey of the Pinckney Island National Wildlife Refuge, Beaufort County, South Carolina." (expected July 1980). U. S. Fish and Wildlife Service, HCRS Contract No. A-55035(79).

"Archaeological Testing and Data Recovery at Two Sites in the Jackson-Mill Creeks Watershed, Site 8 Project Area, Fairfield County, South Carolina." U. S. Department of Agriculture, Soil Conservation Service. HCRS Contract No. C-5807(78). 1979.

LESLEY M. DRUCKER (continued)

"An Archaeological Reconnaissance of the Pendleton-Clemson 201 Facilities Wastewater Treatment Improvements System, Anderson and Pickens Counties, South Carolina." 1978.

"Spiers Landing: A Socioeconomic Study of an Undocumented Late Eighteenth Century Site in Berkeley County, South Carolina." Paper presented at the 12th Annual Society for Historical Archaeology Conference, Nashville, Tennessee, and at the Fifth Annual Conference on South Carolina Archeology, Columbia, South Carolina. 1979.

"Spiers Landing: A Socioeconomic Study of an Undocumented Late Eighteenth Century Site in Low Country South Carolina." Paper presented at the Third Annual Symposium on Language and Culture in South Carolina, Columbia. 1979.

Co-author with Ronald W. Anthony, "The Spiers Landing Site: Archaeological Investigations in Berkeley County, South Carolina." U. S. Department of the Interior, HCRS Contract No. C-5767(78). 1979.

"Archaeological Survey of Proposed Twelve Mile Creek Interceptor." EPA No. C450 372-018. 1977.

Book Review of James B. Stoltman's "Groton Plantation: An Archaeological Study of a South Carolina Locality." The Chesopiean 14(1-2): 1976.

"Prehistoric and Early Historic Metal Working in Native North America." Human Mosaic 7(1):55-80. Tulane University. 1974.

"The Use and Misuse of Ethnographic Analogy: An Example from the Maya Area." Human Mosaic 6(1):25-57. Tulane University. 1972.

"Archaeological Investigations at Brookgreen Gardens: The Oaks and Laurel Hill Plantations." Paper presented at the Sixth Annual Conference on South Carolina Archeology, Columbia, South Carolina. 1980.

"An investigation of the
health status of the
population in the
United States."

"Public health
in the United States
and the role of the
physician in the
community."

"The physician's
role in the community
and the importance of
preventive medicine."

"The physician's
role in the community
and the importance of
preventive medicine."

"The physician's
role in the community
and the importance of
preventive medicine."

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and the importance of
preventive medicine."

"The physician's
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and the importance of
preventive medicine."

"The physician's
role in the community
and the importance of
preventive medicine."

LESLEY M. DRUCKER (continued)

Co-author with Woody C. Meiszner and James B. Legg, "Archaeological Investigations at Allen Plantation (38AB102) and Clinkscates Farm (38AB221), Richard B. Russell Multiple Resource Area, Abbeville County, South Carolina." U. S. Department of the Army, Savannah District, Corps of Engineers, HCRS Contract No. C-54040(80). (expected January 1981).

Co-author with Ronald W. Anthony, "A Cultural Resources Survey of Cedar Island National Wildlife Refuge, Carteret County, North Carolina." U. S. Fish and Wildlife Service, HCRS Contract No. A-54178(80). (expected December 1980).

Co-author with Ronald W. Anthony, "A Cultural Resources Survey of the Proposed Locklair Memorial Airport, Dorchester County, South Carolina." Dorchester County Aeronautics Commission. 1980.

Co-author with Ronald W. Anthony, "An Intensive Cultural Resources Survey of the Proposed Expansion of Highway US 19 East from Cane River Bridge to the Madison County Line, Yancey County, North Carolina (R-59)." N. C. Department of Transportation. (expected November 1980).

"A Cultural Resources Survey of Cates Ford Access Development Area, Eno River State Park, Durham and Orange Counties, North Carolina." N. C. Department of Natural Resources/Community Development, Division of Parks and Recreation Contract No. C-1185. (expected November 1980).

"A Cultural Resources Survey of Proposed Development Areas of Crowder's Mountain State Park, Gaston County, North Carolina." N. C. Department of Natural Resources/Community Development, Division of Parks and Recreation Contract No. C-1168. (expected November 1980).

LESLIE H. HARRIS (continued)

Co-author of "The
History of the
United States
from 1789 to 1899"
and "The History of
the United States
from 1899 to 1914"

Editor of "The
History of the
United States
from 1789 to 1899"
and "The History of
the United States
from 1899 to 1914"

Editor of "The
History of the
United States
from 1789 to 1899"
and "The History of
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and "The History of
the United States
from 1899 to 1914"

Editor of "The
History of the
United States
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the United States
from 1899 to 1914"

RONALD W. ANTHONY
Archaeologist

Background in archaeological research and field investigations, historical research, surveys, excavations, artifact analysis and reconstruction and map construction in North Carolina, South Carolina and Georgia.

EXPERIENCE:

1977 to Present

Carolina Archaeological Services (1977 -).
Field Archaeologist responsible for fieldwork, laboratory supervision and reporting assistance on projects for a variety of governmental and industrial clients. Involved with cultural resources inventory projects for Myrtle Beach Air Force Base, South Carolina (U. S. Department of Defense); for national wildlife refuges and fish hatcheries in South Carolina and Georgia (U. S. Fish and Wildlife Service); for historic preservation programs (Heritage Conservation and Recreation Service; South Carolina Department of Archives and History); for land conservation projects (U. S. Department of Agriculture, Soil Conservation Service); and for private industry in South Carolina, North Carolina and Georgia.

1972 - 1975

Survey Assistant, East Carolina University (Greenville, North Carolina). Government-sponsored survey and excavation projects conducted by Department of Sociology/Anthropology.

1974

Field Archaeologist/Supervisor, East Carolina University (Greenville, North Carolina).
Survey grant, Currituck County, North Carolina.

1974 - 1975

Laboratory Supervisor, Archaeological Laboratory at East Carolina University (Greenville, North Carolina). Supervision of artifact and osteological analysis, reconstruction and curation.

EDUCATION:

B. A., Anthropology, East Carolina University (Greenville, North Carolina), 1975.
Field School in Archaeology, East Carolina University, 1972 - 1975. Crew Chief, 1974. Field Supervisor, 1975.
Master's Program, University of South Carolina (Columbia), 1977.

PROFESSIONAL
AFFILIATIONS:

Society for American Archaeology
Society of Professional Archaeologists
Society for Historic Archaeology
American Society for Conservation Archaeology
Conference on Historic Sites Archaeology
South Carolina Council of Professional
Archaeologists
Archeological Society of South Carolina, Inc.

EDUCATION

Background in Archaeology, Anthropology, History, Geography, and other fields. Construction in North America, South America, Europe, and Asia.

EXPERIENCE
1975 to Present

1975 - 1978

1978

1978 - 1979

EDUCATION

PROFESSIONAL
AFFILIATIONS

RONALD W. ANTHONY (continued)

PUBLICATIONS:

"Descriptive Analysis and Replication of Historic Earthenware: Colono Wares from the Spiers Landing Site, Berkeley County, South Carolina." Conference on Historic Sites Archaeology Papers, Vol. 13:253-268. 1979.

"Experimental Archaeology and Colono Ware from the Spiers Landing Site: A Preliminary Analysis." Paper presented at the Fifth Annual Conference on South Carolina Archeology, Columbia, South Carolina. 1979.

Co-author with Lesley M. Drucker and Michael A. Harmon, "A Cultural Resources Inventory Survey for the Proposed State Park on Lake Hartwell, Oconee County, South Carolina." Prepared for use by the South Carolina Department of Parks, Recreation and Tourism through Davis and Floyd Engineers, Inc. 1979.

Co-author with Lesley M. Drucker, "A Cultural Resources Survey of Myrtle Beach Air Force Base, Myrtle Beach, South Carolina." U. S. Department of Defense, Myrtle Beach Air Force Base, HCRS Contract No. C-5976(79). 1980.

Co-author with Lesley M. Drucker, "A Cultural Resources Survey of the Pinckney Island National Wildlife Refuge, Beaufort County, South Carolina" (expected July 1980). U. S. Fish and Wildlife Service, HCRS Contract No. A-55035(79).

Co-author with Lesley M. Drucker, "The Spiers Landing Site: Archaeological Investigations in Berkeley County, South Carolina. U. S. Department of the Interior, HCRS Contract No. C-5767(78). 1979.

Co-author with Lesley M. Drucker, "An Archaeological Reconnaissance of the Bamberg Wastewater Spray Irrigation Project, Bamberg County, South Carolina." EPA Grant No. C450 278-03. 1978.

Co-author with Lesley M. Drucker, "An Archaeological Reconnaissance of the Lake City Wastewater Treatment Improvements Project, Florence County, South Carolina." EPA Grant No. C450 413-01. 1978.

RONALD W. ANTHONY (continued)

Co-author with Lesley M. Drucker, "An Archaeological Survey of Jackson-Mill Creeks Watershed, Site 8, Fairfield County, South Carolina." U. S. Department of Agriculture, Soil Conservation Service, Columbia, South Carolina. 1977.

Co-author with Lesley M. Drucker, "Archaeological Survey of Proposed Metropolitan Greenville Area Wastewater Treatment Facilities, Greenville County, South Carolina." EPA Grant Nos. C450 370-02, -04, -09, C450 534-09, -11. 1977.

Co-author with Andrew N. Ash, "An Environmental and Cultural Resources Survey of the Creswell 201 Facilities Plan Project Area, Washington County, North Carolina." Environmental Protection Agency and Town of Creswell, North Carolina. Columbia. 1980.

Co-author with Andrew N. Ash, "An Environmental and Cultural Resources Survey of the Nashville 201 Facilities Plan Project Area, Nash County, North Carolina." Environmental Protection Agency and Town of Nashville, North Carolina. Columbia. 1980.

Co-author with Lesley M. Drucker, "A Cultural Resources Survey of Cedar Island National Wildlife Refuge, Carteret County, North Carolina." U. S. Fish and Wildlife Service, HCRS Contract No. A-54178(80). (Expected December 1980).

Co-author with Lesley M. Drucker, "A Cultural Resources Survey of the Proposed Locklair Memorial Airport, Dorchester County, South Carolina." Dorchester County Aeronautics Commission. 1980.

Co-author with Lesley M. Drucker, "An Intensive Cultural Resources Survey of the Proposed Expansion of Highway US 19 East from Cane River Bridge to the Madison County Line, Yancey County, North Carolina (R-59)." N. C. Department of Transportation (expected November 1980).



